Clinical Remarks ON BILATERAL FACIAL PALSY.

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BETWEEN three and four years ago I was consulted in a case of injury to the head, attended, or rather perhaps followed, by symptoms which interested me a good deal at that time.

A young man, twenty-one years of age, was alighting one morning (five months previous to the date of my interview with him) from a train which had overshot the Deptford station on the London and Greenwich line, when, mistaking in the dark the low wall which flanks the railway for the platform, he stepped on to it, and the next moment was precipitated head-over-heels into the road beneath. The main facts which I learnt concerning his subsequent history were as follows: that he was carried insensible to the *Dreadnought* Hospital, where no local signs of injury to the head were detected beyond the fact that blood was oozing from the ears and nose, and where also some of the ribs on the left side were ascertained to be broken; that he remained absolutely unconscious for about four-and-twenty hours, and partly unconscious for two days more; that during this time it was observed that he was paralysed on the left side of the body and on both sides of the face, that he squinted and was deaf, and that owing to a wound of the lung pneumothorax was developed on the corresponding side; that after his recovery of consciousness he remained feeble in mind, with impaired memory and tendency to delirium and emotional disturbance; but that (with the exception that the squint disappeared from the eye first affected and then attacked the other) gradual improvement had taken place, chiefly in his general health and the condition of his chest, but to some extent also as regards his cerebral symptoms.

He was a spare but well-nourished man, with a curiously vacant expression of countenance. He had almost complete paralysis of both seventh nerves. His face was smooth and void of wrinkles. He could not close his eyes, or whistle or blow out a candle, or retain fluids in the anterior part of the mouth, or bring his lips into actual contact. Neither could he pronounce the labial letters *b*, *p*, *m*, *v*, *f*, or *w*; but he could pronounce all others, and in conversation invariably replaced the labials by their corresponding linguals—*b* by *d*, *p* by *t*, *m* by *n*, and *v* and *f* by *th*. His hearing was impaired on both sides, more especially on the right; but he could hear. The external rectus of the left eye was paralysed, so that he presented an internal squint. The left upper extremity was partially paralysed, a little contracted, and slightly but generally wasted. Moreover, there was slight impairment of sensation, especially in the little and ring fingers. The left leg also appeared a little wasted, but he seemed to use it almost as well as the other. He was, so far as I could judge, quite sensible; but it was said that his memory was still defective, that he was incapable of application, and that now and then he would give way to anger, which formerly he never did. No other abnormal phenomena referable to the nervous system were observable. His sight was good, he could distinguish colours, his pupils were equal and acted naturally, and there was no paralytic condition of any of the cerebral nerves but those which have been specified. There was impaired mobility of the left side of the chest, with some contraction of it, displacement of the heart to the left, and dulness at the base. No signs, however, of progressive disease were detected.

There was no evidence as to what part of the head was struck in this case, or, indeed, that the head itself received any direct injury. But it was quite clear that damage had been inflicted on the soft parts within the skull. There was doubtless some bruising of the brain; but where exactly it was, under the circumstances, it is idle to speculate. So much, however, was clear—namely, that some bruising or laceration had occurred in the neighbourhood of the pons Varolii, and that there had been more or less implication of both acoustic and both facial nerves and of the sixth nerve on the right side. And the opinion I formed was to the effect that he had had a fracture of the base of the skull; that the several nerves above named had been damaged, either by being themselves bruised or by being pressed upon by blood extravasated beneath the dura mater; and that the hemiplegia might have resulted from damage to the motor tract in the immediate vicinity. The probability that he had fracture of the base was enhanced by the bleeding that took place from both ears at the time of the accident. I may here state that I have recently learnt from Dr. Kavanagh, under whose care the patient was, and who still sees him from time to time, that he has so far recovered as to be able to earn a livelihood, but that his paralytic symptoms and his peculiarities of speech remain much as they were.

I was chiefly interested in this case because of the existence of double facial paralysis—a condition which is very rare, and which I have seldom seen—and of the association with it of a phenomenon which, on theoretical grounds, might be expected to be present in such cases, but which I had never hitherto observed—namely, absolute inability to utter any labial letter. I need scarcely say that in paralysis of the portio dura of one side defective articulation is not generally noticeable, and that the patient can pronounce the labials without difficulty. My interest in the case was revived about a year ago by the fact of another patient coming under my care, who (also as the consequence of injury to the head) suffered from double facial paralysis, but who presented additional symptoms of a remarkable character; and in whom the opportunity was afforded of investigating post mortem the causes of the phenomena observed during life. The following are the particulars of the case:—

A man, formerly a soldier, forty years of age, came under my care on Sept. 21st, 1881. Exactly two months previously he had fallen down some area steps, and struck the back of his head, and had been carried insensible to one of the London hospitals. A deep cut was found in the occipital region, but no sign of fracture was detected, and he remained more or less insensible for a fortnight. At the end of a month he left the hospital presumably well. But I have since learnt that indications of paralysis of the facial nerves had been observed. During the ensuing month he remained at home, and it was noticed that he was much more irritable and fidgety than he had previously been, that he was inclined to be drowsy, and that his speech was thick and indistinct. Moreover, his appetite failed, he had a constant and painful desire to go to stool, the bowels being relieved with difficulty two or three times a day of a few small hard scybala, and he lost flesh and strength. There was no impairment of memory, however, no vomiting, no loss of control over his bladder. On admission into St. Thomas's Hospital it was noted that he was a short, feeble, emaciated man, very bald, with sunken eyes, and an immobile, melancholy-looking face. There was a recent scar about two inches long in the occipital region. On closer investigation it was discovered that he had imperfect paralysis of both facial nerves; his forehead was smooth, he could not close his eyes, the naso-labial furrows were ill-defined, and if he attempted to laugh only a very slight movement was discoverable in the lower part of the cheeks and about the mouth. He could, however, close his lips, and had no difficulty in keeping fluids in his mouth. His want of variability of expression was clearly due to the paresis of his facial muscles, and the prevalent melancholy look was dependent partly on the same cause, but partly on the subsidence of the eyes into their sockets. There was no other obvious nervous default in connexion with the head and neck. The muscles of the eyeballs acted properly, the pupils were equal, and acted to light and accommodation, his sight was good, and the fundus of the eyes showed no pathological change. There was a little deafness on both sides, but this was said to be of old date. His tongue was protruded straight and without difficulty; there was no defect of mastication or deglutition, and phonation remained unaffected. His speech, however, was, as it had been said to be, thick and indistinct. He could enunciate all the individual labial sounds, and even the linguals, but when uttering them in combination they were imperfectly articulated and slurred. His speech, in fact, was exactly such as is observed in cases of early glosso-labio-laryngeal palsy. It is right to say, however, that he always asserted that his speech was naturally indistinct, and that he did not admit it had deteriorated lately. The arms, especially the forearms, were much shrunken; the legs also

were extremely thin. There was no wasting or paralysis of particular muscles or group of muscles; there were no tremors; but there was extreme general muscular debility. Sensation was unimpared; the superficial reflexes were little marked; the tendon reflexes were present, but perhaps a little sluggish. He appeared to be low-spirited and apathetic, and complained of pain at the back of the head, and in the umbilical and epigastric regions. The chest expanded imperfectly, but all the thoracic viscera appeared to be healthy. The respirations were normal as to frequency, and the pulse feeble, but otherwise natural. The abdomen was shrunken and its walls flaccid; no tenderness or tumour could be detected. Tongue thickly coated, appetite bad, no sickness; he complained of persistent uneasiness about the rectum, and a constant desire to defecate, but there was no evidence of piles or other disease in the rectum or anus; there were not, and there had never been any discharge of pus or mucus, and the motions, which were passed with extreme difficulty and much straining, were voided only occasionally and in small quantities; they were healthy in character. The urine was normal in amount, slightly alkaline, and containing amorphous phosphates, but no albumen or sugar; its specific gravity was 1025. His temperature was normal; his weight eight stones and half a pound.

There was no very great change in the patient's symptoms during the remainder of his illness, excepting that he gradually became thinner and weaker, and more apathetic.

He was always quiet, reserved, and disinclined to speak; for the most part indifferent as to what was going on around him, yet sometimes becoming irritable and worried about trivial things. His appetite was bad, but he complained neither of sickness nor of thirst; and his bowels continued almost to the end to be a source of great discomfort and misery to him. There was never discovered any sign of local mischief, and the motions were always normal in character, or perhaps a little hard; but he suffered from almost constant tenesmus, which was only momentarily relieved by the occasional passage of small lumps of fæcal matter. It may be added that there was no discernible undue accumulation of fæces in the rectum, and that on the average a sufficient amount was passed daily. At times, and more especially latterly, this symptom was kept in abeyance by the use of morphia suppositories. His paralytic symptoms remained without change. His temperature was generally about the normal, occasionally rising a little above, but more commonly falling a little below. He had at all times a great inclination to remain in bed; and for the last three or four weeks of his life remained in bed almost constantly, lying huddled up on his side, with his head buried beneath the bedclothes, and though quite sensible, or at any rate understanding all that was said to him, seldom vouchsafing any answer to those who questioned him. He seemed also to be getting more and more imbecile. About a week before his death his weight was ascertained to be only 6 st. 4½ lb., so that he had lost nearly two stones from the time he was received into the hospital. During the last week of his life he vomited occasionally.

About noon on Dec. 23rd, two months after admission, he was discovered insensible, with head thrown back, and mouth open, sweating profusely, breathing at the rate of four respirations in the minute; his pulse very feeble, irregular, and about 90; his pupils contracted and equal; and his temperature 96·7°. He continued in this state (his temperature, however, falling to 95°) until his death, which took place shortly before five the same evening.

The points of particular interest in this case were: the presence of double facial palsy; the curious combination of irritability, apathy, and drowsiness, and apparently progressive enfeeblement of mind; the rapid general wasting of the tissues, and more especially of the muscles without paralysis; and the constant and painful desire to defecate, apart from the presence of any local conditions to explain it. To what were these symptoms attributable? That there was damage to the soft parts within the skull was certain; and that there was fracture of the base of the skull was probable, at least I thought so. It is true that no fracture was detected at the time of the accident, that there had been no bleeding or discharge of watery fluid from the ears, and that a blow on the back of the head is less likely to be attended with fracture at the base than blows in several other situations. But, on the other hand, a blow here not infrequently causes a linear fracture of the occipital bone which fails to be recognised during life; and such a fracture might easily run up to the suture between the occipital and temporal bones, and might lead to the separation of the edges of these bones, and then become connected with a fissure running across the base of the skull. Besides which we had in this case just that kind of paralysis which might be expected to result from a basal fracture, which seemed best explained by such an accident, and which in the case first narrated was almost certainly due to that cause.

One can never predict with certainty either the amount or the situation of the injuries which after death will be found to have been inflicted on the brain even by accidents in which the bones of the skull are unbroken. Not unfrequently there is injury of the part corresponding to the blow; sometimes there is laceration either in the substance of the brain or of some of the delicate laminæ or processes which extend between adjoining parts; almost always there is more or less serious bruising by contrecoup of those regions of the surface of the brain which abut on bone opposite to the seat of injury. On the whole, however, considering that the patient had not fallen very far, and that there was no depression of skull at the point which had been struck, I was inclined to think the chief, if not the sole, injury to the brain was from contrecoup. I shall best explain my views, perhaps, by narrating a case that occurred to me some years ago.

A man, walking over London-bridge, was seen by a policeman to stagger and fall violently on the back of his head. He had probably slipped on a piece of orange-peel. He was picked up insensible, and brought to St. Thomas's Hospital, where in a very short time he died. There was some bruising and laceration of the integument over the occiput; but no fracture was discovered. At the post-mortem examination, however, a linear fracture of the occipital bone was found, extending from an inch above the tuberosity into the foramen magnum, and situated to the left of the median line. There was much effusion of blood into the cavity of the arachnoid and into the subarachnoid tissue; and there was considerable bruising, with laceration, of the anterior portions of each cerebral hemisphere, and of those portions of the middle cerebral lobes which were in relation with the greater sphenoidal wings. There was no other injury.

Now in this case there was just such a fracture as I supposed might have occurred in the case under consideration, but its direction was somewhat different; and the mischief within the skull, excepting that there was no damage to the facial nerves, was precisely that which usually results from contrecoup, and which I expected to find on the present occasion. I hoped, however, to find something more.

A careful autopsy was made, at which I was present. The scar on the occiput was very distinct; but there was no further affection of the soft parts outside the skull. There was no trace of injury to the skull itself; clearly there had been no fracture of the base. The front and under part of each anterior cerebral hemisphere were softened and of a yellow-ochre tint. The same conditions were observed in the anterior and under part of each middle lobe; and a few yellowish spots were observed about the flocculi and neighbouring part of the cerebellum. In the first two situations the softening and discolouration involved the whole thickness of the grey matter; but the subjacent white matter appeared to be unaffected. In the last situation the change was extremely slight and wholly superficial. Indeed, it seemed probable that the brain substance itself was not involved, and that the pigmentary deposit was limited to the pia mater. With these exceptions the brain was perfectly healthy; and there was no visible damage either to the seventh or to any other of the cerebral nerves. The medulla oblongata and the cord were healthy, and presented no traces of secondary degeneration. The thoracic and abdominal viscera, including the rectum, were sound.

The results (shall I confess it?) were somewhat disappointing to me. But it is by the cases that thus disappoint us that we learn, or are made to think. It is such cases too that ought especially to be stored up in the memory, in order that when other obscure or exceptional, or apparently misleading, cases come under observation, they may serve to illustrate or explain them, or to correct the inferences we are disposed to draw from them. Now, although there was no fracture at the base of the skull, or visible injury to any of the cerebral nerves, it is not very difficult, I think, to understand how some damage may, nevertheless, have been inflicted on the facial nerves within the skull sufficient to have induced the permanent but incomplete paralysis from which the patient suffered. The effects of contrecoup in this case were observable in all those parts of the surface of the brain, which were antipodean, so to speak, to the part of the skull

struck; or, in other words, in those parts of the nervous centres which were in contact with the anterior bony boundaries of the anterior, middle, and posterior fossæ of the skull severally; and the portio dura is so situated within the skull as, perhaps, to be more amenable to damage under these circumstances than any other cerebral nerve. The failure to discover any pathological change does not, of course, prove that no damage had been sustained.

Further, I do not think it need be assumed from the conditions found in this case that the double facial palsy observed in the first case was not due to fracture across the base of the skull, though they prove clearly enough that a blow on the head may cause such paralysis apart from fracture. But the chief interest of the case, after all, lay elsewhere—namely, in the presence of the group of non-paralytic clinical phenomena, to which nothing similar existed in the first case, and in their explanation. What caused the patient's irritable apathy and apparent enfeeblement of mind? What caused his persistent mental misery? What caused his progressive and rapid emaciation and muscular enfeeblement? To these questions, I am sorry to say, I can give no satisfactory answer. All the perceptible damage to the surface of the brain was well removed from the generally recognised motor and sensory areæ; a fact which goes to explain the absence of cerebral paralysis and of impairment of the special sensory functions. Cases have been adduced to show that disease of the front part of the anterior cerebral lobes involves a profound alteration of the moral character of the patient and enfeeblement of his intellect. On the other hand, many cases of injury of this part have been met with in which no special symptoms of importance have ensued. "Dr. Crichton Brown, however" (I quote from Ross), "has drawn attention to the fact that during the early stage of general paralysis of the insane, when the convolutions of the frontal lobe are particularly apt to manifest degenerative changes, the characteristic symptoms consist of 'general restlessness and unsteadiness of mind, with impairment of attention, alternating with *apathy* and *drowsiness*.'" These symptoms are identical with some of the special symptoms presented by my own patient; and on the whole, perhaps, are such as in the present state of our knowledge might be thought likely to follow on such lesions as were found. The gradual wasting and debility, and the rectal trouble, however, seem to me at present inexplicable.

I may add that in the tenth volume of the Pathological Transactions I recorded a case pathologically identical with this; but in which the only history obtainable was that the man had been earning his livelihood subsequent to the accident (of which there was no record) which caused the superficial cerebral hæmorrhage; and that after a bout of drinking he was attacked with epileptiform convulsions, of which he died.

FIBRINOUS COAGULA IN THE HEART AND PULMONARY ARTERY.

By SIR JOSEPH FAYRER, M.D., F.R.S.

MANY years ago, when in India, I called attention to the subject of thrombosis of the pulmonary artery, and the formation of decolourised fibrinous clots in the right cavities of the heart, extending into the ramifications of the pulmonary artery, as a cause of death after surgical operations or injuries, and also during the course of blood-poisoning and certain forms of disease. My views and experience of this subject are detailed in a work entitled "Pathological Observations in India," and I now revert to it as a subject which merits more consideration than it has hitherto received and is entitled to, as a serious and often fatal complication of cases, which otherwise might have terminated more favourably.

These decolourised fibrinous clots in the heart and pulmonary arteries have been attributed either to post-mortem coagulation or, when admitted to be of ante-mortem occurrence, they have been considered as merely one of several phenomena which attend the process of dying, and not as an immediate cause of death. This, I venture to contend, is not always the case; but, on the contrary, that such clot and plugging of the pulmonary artery on the right centres themselves cause death not unfrequently in cases in which without them death could not have occurred. My experience of this subject has been acquired chiefly in India; but it has been confirmed by observation in this country, and I am under the impression that this is a more frequent cause of death, not only in the course of pyæmia, septicæmia, and certain diseases, but also after surgical operations, wounds, and injuries.

A malarious climate I believe to be an especially predisposing cause, and in the state of malarial cachexia which so frequently results from residence in such countries, even where there may have been no fever, and especially in cases where anæmia is splenic or hepatic incompetency is present, it is prone to happen. But it is by no means confined to persons so affected, for I have frequently seen it in individuals who presented no cachectic appearance nor in whom was there any obvious indication of visceral disease. Obstruction of the pulmonary artery and right cavities of the heart by coagula, causing death, may thus occur in persons not cachectic from malarial influences. Still, the disease is especially liable to affect persons labouring under that impaired state of health; where the spleen is diseased it is very prone to happen and to prove rapidly fatal.

Hyperinosis, or excessive formation of fibrinous material in the blood, is the condition on which the thrombosis depends, whilst the condition which occurs in surgical fever, pyæmia, and in exhaustive diseases such as cholera, malarial fever and cachexia, diphtheria, scarlatina, puerperal and other diseases, leads to the hyperinosis. Thrombosis of the pulmonary artery kills by arresting the passage of blood through the lungs, whilst coagula in the left side of the heart and thrombosis of the arteries operate locally by causing gangrene of the part. There is, however, a strict analogy between the two forms of thrombosis; they arise from fibrinous material in the blood, and the predisposition to the formation of this is equally engendered by exposure to malarious influences, as it probably is by other diseased states.

The so-called abscesses which are so frequently found disseminated in the tissue of the liver, spleen, kidneys, lungs, and in the areolar tissue in persons who live in hot and malarial countries, are not primary abscesses, but originate in patches of parenchyma which have perished owing to the deposit of emboli in the small vessels at the spot. Around such dead patches, as around the core of a boil, pus is subsequently found, and so the local death is converted into an abscess; though in cases of blood-poisoning in India death frequently occurred before these suppurations took place, when the part was found simply as a piece of dead tissue surrounded by an areola of congestion or inflammation.

As to the mode in which the change in the blood is brought about I am ignorant, though it is not difficult to understand why it should be so when the spleen and other blood-elaborating organs are compromised. But of the fact and of its consequences I know there can be little doubt, as many cases within my own observation have convinced me. This subject has been recently attracting attention, hence these remarks, derived chiefly from experience in India, but probably applicable here.

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NOTE ON AMPUTATION.

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PERHAPS in no case is the judgment of the surgeon more severely taxed than when he is called on to decide the question of amputation in an injury to a limb. The rules of surgery on this subject are necessarily very vague, and too often they can be applied with but little force to the particular instance; for in any case, many considerations, each one largely affected by the rest, are involved. Of course when the injury is of such a nature, from the destruction of large vessels, nerves, or other important structures, that recovery is out of the question, there is no room for doubt. It is when the injury is of such degree and extent that although recovery is possible, it is yet improbable, involving very grave risks to life, that the surgeon's anxiety is raised and

his way becomes difficult. Often in these cases one man forms a decided opinion on what appear to others to be very inadequate grounds. Even when to others his conclusion appears to be sound, he may fail in explanation to set forth sufficient evidence of it. If he has really reasoned on the subject, he cannot reproduce the argument for the guidance of another. He gets no farther than, "I think upon the whole," &c. He may be right, as right as a man who can express his thoughts and explain clearly the ground of his opinion; but it must be allowed that this kind of decision is neither instructive nor satisfactory.

In endeavouring to form a judgment in such cases it seems to me that one has to consider, first of all, whether the injury is greater than any operation for its removal. If the operation would not be the means of substituting a less injury for a greater—less for more risk in the future,—it surely ought not at this time to be thought of. And deciding in favour of an operation on this ground, the question comes, Is the chance of recovery from the operation so much greater as to cover the risk from the second shock which the operation would necessarily cause? This last consideration oftentimes adds greatly to the difficulty of decision. Then further, assuming the injury not to be beyond all reasonable chance of repair, is it worth while, for the prospect of such future use in the limb that might remain to him, for a man to run, in order to preserve it, any additional risk of his life? and, if so, to what extent? With all this it has to be borne in mind that if an attempt is made to save the limb, in the event of failure there may be some chance in the future of removing it, and of still saving life. But the probability is that such secondary amputation will be forced on us under unfavourable conditions; in other words, that there will be but little choice of time.

The opinion of surgeons has of late years gradually changed respecting the comparative advantages and disadvantages of what is called primary and secondary amputation after injury. It was formerly held that less risk to life is incurred by operating immediately after an injury than at a remote period, and this view was, I believe, founded chiefly on the records of military surgery. This, however, has not been confirmed in recent years by the experience of civil practice, and I suppose that at the present time such a question would receive for the most part doubtful or contradictory answers. Does not this depend on the want of distinction which ought to be drawn between different cases of secondary amputation? When in an instance of severe injury an attempt is made to save a limb much local and some constitutional disturbance is sure to follow, and in unsuccessful cases the patient either dies directly from this, or the limb passes into a condition beyond prospect of recovery. Now, in the question of secondary amputation, if we can select our own time for the operation, when the fever or constitutional disturbance which has been provoked has subsided, and we operate to remove a useless or hopelessly damaged limb, such amputations are done, I believe, with better prospect of success than primary ones, and this chiefly because they remove a source of great and perpetual irritation with comparatively little shock. But if, while much constitutional disturbance prevails, we are called on to choose between amputation and death, we operate under most adverse circumstances and with much greater risk, no doubt, than in primary amputation.

So, then, I should answer the question thus: Secondary amputations are more favourable than primary ones when there is a choice of time—that is, when we can afford to wait till the temperature and other signs of general disturbance have subsided; but secondary are less favourable than primary amputations if the operation is forced upon us at a period of the case when a high degree of fever still prevails. Herein, too, lies the difference in the prospect between secondary amputation after injury and amputation in disease, for in the latter case there is almost always choice of time.

THE Rev. W. Hume has appealed to the Governors of the Hastings, St. Leonards, and East Sussex Infirmary to reconsider their decision to pull down the old hospital, which contains about thirty-two beds, and replace it by a new one containing 100 beds. He contends that by increasing the accommodation of the old institution to sixty or sixty-five beds the wants of the district would be fully met.

THE foundation-stone of a new hospital was laid at Rugby on the 19th ult., the founders being Mr. and Mrs. Wood of that town. The prospects of the provision of a liberal endowment are very encouraging.

ON VENESECTION.[1]

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THE disuse of bloodletting as a remedy has so frequently been the subject of remark that observations respecting it, except by way of explanation, are unnecessary. We are often disposed to reproach ourselves when we contemplate the extreme and violent fluctuations which have taken place in the practice of medicine, both as regards the alternate employment and abandonment of particular drugs or lines of treatment, and as regards the principles of treatment generally; but while we have reason to be ashamed of the influence which mere fashion and love of novelty exercise, some of the changes which at first sight seem most inexcusable and unaccountable have really been the inevitable results of increasing knowledge and the steps of advancing science. I believe this will prove to have been the case with venesection. Bleeding was formerly employed with little discrimination; in some cases it did good, in others it must have done harm; in a still greater number it probably had no appreciable influence on the course of the disease, but did not injure the patient. The uselessness and danger of the practice were frequently shown, but doctrine or theory has with the mass of men far more influence than observation, and while the experience of one set of observers was simply set against that of another, recoveries without bleeding did not carry conviction to the minds of those who had seen recoveries after bleeding; and it was only when, by the evidence of the post-mortem room and the experimental study of inflammation and other morbid processes, a revolution in the general doctrines as to disease had been effected that the balance was turned, so that venesection was condemned and abandoned.

During some years there has been a gradual reaction. It has been shown, notably by Sir James Paget, that venesection is attended with very little risk either of immediate or remote injury, while on the other hand it is in suitable conditions a remedy of striking power. A return to indiscriminate bleeding would be a great evil, but of this there is really no danger. It is now better known what abstraction of blood can do and what it cannot. The indications for resorting to it can be more precisely defined, and sooner or later the teachings of physiology applied to the rectification of abnormal conditions present in disease will remove the stumbling-block for a time thrown in the way of this powerful therapeutic agency by morbid anatomy.

In the first place, general bleeding is not employed as a remedy for inflammation as such. We have in the writings of our predecessors a vivid description of the effects of venesection in iritis—the relief of pain, the diminution of vascularity, the arrest of destructive changes; but true as this undoubtedly is, such advantages, even were they constant, which is by no means the case, may be purchased too dearly, and there is no inflammation of an internal organ in which venesection is resorted to. Nor is it for the control of pyrexia, whether the result of a local inflammation or of one of the specific fevers. What we seek to do, and what we can effect by venesection, is to modify the distribution of the blood and the pressure within the arterial or venous system. The circumstances under which this may be required are various; some of them I shall enumerate, and, when I can do so, illustrate by recent experience of my own.

Perhaps the most simple and unmistakable indication for the necessity of reducing the blood-pressure within the arteries by bleeding is when an aneurism is giving rise to severe pain, or is threatening life by pressure upon a nerve or some important organ. I have repeatedly seen immediate and striking relief afforded by a small bleeding in the practice of the late Dr. Sibson, whose teaching and example I have followed. An opportunity occurred last year, when a patient, who had been some time under my care in St. Mary's Hospital suffering from a large aneurism of the arch of the aorta, was suddenly seized with violent dyspnœa during my visit to the wards. His face was purple and swollen, and he was evidently in agony, while it seemed as if he must die within a few minutes unless relief could be given. My resident medical officer, under my supervision, bled him to about

[1] A paper read before the Harveian Society, Feb. 1880, with slight additions.

eight ounces, and he was very soon in a comfortable sleep. In aneurism, however, bloodletting can only be palliative, and though it may relieve pain and prolong life for a time, it does not restore the sufferer to health. Much more than this is claimed for venesection in another class of cases, when it is practised for the relief of over-distension of the right side of the heart. The circumstances under which this condition arises are various, but they are chiefly comprised under disease of the heart, or obstruction to the pulmonary circulation by disease of the lungs, especially pneumonia and bronchitis.

Pneumonia has been the great battle-ground of many therapeutic controversies, but especially of the question of bleeding and the use of stimulants. A more unsuitable field could not have been chosen. It is a disease which varies extremely as to the danger attending it at different times and places, and under different circumstances, quite irrespective of the treatment pursued, so that statistics are fallacious. Again, it runs a definite course and terminates by a very marked crisis, which allows an enthusiast or partisan to imagine that the remedy which coincides with the crisis has brought it about. The clinical history of pneumonia, uninfluenced by any but hygienic treatment, having been carefully followed and ascertained, it became possible to estimate the effects of bleeding, and it may be stated confidently that in some cases it is most useful, preventing suffering and saving life, while in others it would only be injurious. The reason is that it is not the inflammation of the lung which is combated, but a particular complication—over-distension of the right side of the heart. The merit of making this clear and of enabling us to recognise the indication for bleeding in pneumonia is, I believe, due to Dr. Markham. In some cases, then, of pneumonia the rapid consolidation of a certain part of the lung with congestion of a still larger portion gives rise to a degree of obstruction in the pulmonary circulation which embarrasses the right ventricle; this no doubt, being enfeebled by the high temperature of the blood, induces dilatation, and eventually almost paralysis. The symptoms attending this condition, which may be established very early in the attack, are most distressing: the patient is pale or livid, instead of flushed, is gasping for breath, and probably unable to lie down; the alæ nasi are working; he can scarcely speak, and the cough, if any be present, is a mere short hack, raising no expectoration; there may be a cold sweat on the face. On examining the heart, it is found to be beating violently, and a striking contrast is presented between the force of its impulse and the small and weak beat of the pulse, explained by the inadequate amount of blood which finds its way to the left ventricle, in consequence of the obstruction in the lungs and the enfeebled state of the right ventricle. However forcible the systole may be, it can have little effect on the pulse if there is only a scanty amount of blood in the ventricle to be driven into the arteries. The right auricle can generally be made out much beyond the right border of the sternum. It is under these circumstances that those striking effects of bleeding are obtained which have been so often described and which I have myself witnessed. As the blood flows the pulse improves, becomes fuller and stronger; the breathing becomes less frequent and shallow; the oppression is relieved; and not uncommonly the patient, finding to his astonishment that he can take a deep breath and cough without pain, expresses himself as feeling quite well. The pneumonia pursues its course under more favourable conditions, and recovery is usually the result. Cases of this kind are rare in the hospital practice of London, but I have met with a few. In the country they are more common.

Bronchitis frequently gives rise to over-distension of the right side of the heart, and I have seen venesection employed for its relief, but I have never ventured to practise it myself. In chronic bronchitis and emphysema, in which distension is always more or less present, the conditions which produced it persisting would certainly cause it to recur, and even acute capillary bronchitis is usually of such long duration that a single bleeding could not be looked upon as final. There are, however, no doubt cases in which we ought to give the patient the chance which venesection seems to offer in desperate circumstances, but I have hitherto preferred having recourse to an emetic, which will at the same time unload the air-passages and powerfully compress the heart, forcing the blood out of the right ventricle, and so far relieving the over-distension as to enable it to complete its systole, which is the end to be obtained.

In heart disease I have seen no case of aortic valvular affection, obstructive or regurgitant, in which venesection seemed to be called for, and in mitral regurgitation the good effects of digitalis can be relied upon with so much confidence that it claims the first trial. It is in mitral stenosis that bleeding is most frequently demanded. When the mitral orifice is narrowed there is a chronic condition of distension of the right ventricle, and this is liable to dangerous increase under various circumstances, while digitalis is not to be implicitly trusted. The question whether bleeding should be employed or not then arises not unfrequently in mitral stenosis, and indeed the evidences of dilatation of the right ventricle, the occurrence of tricuspid regurgitation and distinct reflux of venous blood into the large vessels, are more common in this than in any other form of heart disease. But while venesection is at times as strikingly useful in mitral stenosis as in the cases of pneumonia alluded to, I have not often employed it. I may have lost opportunities through timidity or excess of caution, but I think it probable that the hypertrophy of the right ventricle, which is established during the gradual increase of pressure in the pulmonary vessels, makes the over-distension less dangerous. In deciding whether to bleed from the arm or not when there is mitral stenosis, account must be taken not only of the existing degree of distension and embarrassment of the right ventricle, but of the way in which it has been brought about. If it is the result of exposure to cold, or imprudent exertion, or emotional excitement in a patient previously manifesting little evidence of heart disease, then bleeding may be of the greatest service. In a lady to whom I was called when apparently *in extremis*, and who had been picked up on the stairs unconscious after emotion and exertion together, the action of the heart was so irregular, and the sounds so confused, that a diagnosis could only be arrived at by a process of exclusion. After eight ounces of blood had been taken she was greatly relieved. Next day the heart was acting more regularly, and a systolic tricuspid murmur was heard; a few days later the tricuspid regurgitation had ceased, and a presystolic mitral murmur was developed. With this change in the physical signs, which I have frequently noted, there was steady improvement, and the patient recovered, though she never regained her previous condition.

When, on the other hand, the distended state of the right heart under consideration comes on in mitral stenosis under the influence of the work and exposure of the daily life of the classes who come under our care in hospitals, the rest, warmth, food, and care which they receive constitute such a difference in their favour that bleeding from the arm is rarely necessary; but I have often found six or eight leeches applied over the liver, enlarged and painful through venous congestion, of very great use. When, however, the venous stasis and failure of the right ventricle are the results of the valvular obstruction gradually developed in spite of favourable conditions of all kinds, bleeding, whether local or general, can be of little service. The last occasion on which I have employed general bleeding for the relief of over-distension of the right ventricle was in October, 1882. A man, aged about fifty, was admitted into St. Mary's Hospital with a vague history of some acute pulmonary attack. He was suffering from obvious painful respiratory distress, looked pale and haggard, and complained of severe pain in the loins. His temperature was high, the pulse frequent and large but short, and the skin perspiring. There were physical signs of bronchitis, but not sufficient to account for his dyspnœa. The heart was beating violently, the right auricle was distended, as was shown by dulness to the right of the lower sternum, and a systolic murmur was heard at the apex, but there was no evidence of mitral stenosis. His distress was so great and so clearly attributable to over-distension of the right side of the heart that it was determined to relieve this condition, although the cause which had given rise to it could not be satisfactorily made out. He was accordingly bled to eight ounces by Mr. Spicer, my resident medical officer. This gave some relief, but it was not satisfactory, and was only temporary. After death, which took place two days later, it was found that a large thrombus had formed in the pulmonary veins, and having become detached had got entangled in the mitral valve; fragments had also been carried away in the circulation, and had lodged in various organs. This sufficiently explained the cardiac embarrassment and the failure of venesection to relieve it.

(To be concluded.

A SIMPLIFIED EVACUATOR FOR LITHOLAPAXY.

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THE operation for the immediate removal of a calculus through a catheter, like many other surgical operations, can be accomplished more or less satisfactorily by any one of several instruments which much resemble each other. But it can be done better by employing a more perfect apparatus than those now generally in use. It has been said that "no new form of instrument is required by this operation," which is true so far as it implies that neither a lithotrite nor an evacuator is a new instrument. But it would be a mistake to infer that the operation could have been done with the instruments of the old lithotrity, and that they had needed no change to adapt them to what is now required of them, or that they cannot be still further modified to advantage. The new operation cannot be performed with the old instruments. It requires a larger evacuating catheter than that of Clover, through which the usual product of the lithotrite could not pass, except powder and sand, and that only in limited quantities, because the other detritus obstructed the entrance of the tube.[1] Though at first received with a good deal of distrust, the large catheter has been finally adopted by all the surgeons who have done the operation, and in fact cannot be dispensed with. It should be combined with a thoroughly efficient aspirator; but no particular form of aspirator has so far met with general approval. Though better than it was, surgeons have none as yet which entirely satisfies all requirements of the operation, and is at the same time compact and convenient to handle, and simple in construction. This part of the evacuator still needs improvement.

The usual parts of an evacuator, not including the catheter, are these:—

1. The exhaust, the best form of which is an elastic bulb.
2. A space or trap for air at the upper part of the instrument.
3. A glass receiver at the lower part, to collect and show the débris.

In drawing out fragments from the bladder through the large catheter, one bulb or aspirator, if strong enough, is about as efficient as another. An aspirator of almost any shape, and having almost any combination of its parts, will do this. So will a mere elastic bulb attached directly to the catheter, without joints or receiver, if it is placed lower than the catheter, bent down like the body of a retort, so that the fragments can fall to the bottom of it; and the instrument will still work well if it has joints made, for economy, of cork or rubber instead of metal. But, however otherwise arranged, a satisfactory aspirator should have—

4. Some device, near the catheter, to act as a trap for débris and secure every fragment that has passed it.

The chief difference among evacuators now is in the certainty with which they retain the fragments they have aspirated. Any instrument will draw out the fragments, but few hold them securely, for the débris do not always fall into the glass receiver, nor do they always remain in it. On the contrary, they are easily carried back to the bladder. This defect in the action of the evacuator has received little attention from surgeons, although it is the only point connected with the instrument which offers any difficulty whatever. Until recently it has been remedied only by sacrificing simplicity in the apparatus.

In endeavouring to make a satisfactory evacuator for litholapaxy, many experiments have to be tried. It is quite possible that a perfectly satisfactory instrument might have been contrived some time ago if it had been generally understood that an evacuator that works best with pieces of broken coal in a vessel of water will succeed best with the fragments in the bladder.[2] So also will the surgeon if he is otherwise well qualified. It is true that the living tissues are easily injured, but in other respects the experiment can be made sufficiently like the operation to give it great value. Aspirating débris from the bladder is not a question of pathology, but of operative surgery; of physics. And in view of the fact that we fail in some bladders to discover a last fragment even by repeated washing, an evacuator should be so constructed that it will absolutely prevent a fragment that has once passed the catheter from returning to the bladder to become the nucleus of another calculus.

It is not altogether easy to meet this requirement, because the solid particles are usually borne back and forth with the current of water. In a common evacuator, they are carried wherever it goes, first from the bladder to the bulb, and then, when it is reversed, back to the bladder, a part only falling into the receiver at each aspiration. As we may fairly assume that a surgeon would not deliberately inject foreign bodies into a patient's bladder, there must be something wrong in a system which obliges him to do this, and makes it necessary to aspirate the same débris twenty times over in order to remove it. In short the apparatus as commonly arranged is still a defective one, and needs some special contrivance to assist the action of gravity in securing the débris.

Surgeons have long felt this. The use of a long elastic tube connected with the catheter has been more than once criticised, and with some reason, on the ground that it might contain fragments which would be returned to the bladder. And again, in order to shorten by an inch the route from the bladder, a less convenient stopcock has been substituted for the usual one. But lithotritists should be fully aware of the fact that whether there is an elastic tube or not, a tenfold greater quantity of fragments is generally driven back out of the bulb itself, and that the difficulty lies almost wholly in that part of the instrument. At each expansion débris are drawn from the bladder into the bulb, where they are detained until, when it is compressed, they are injected back into the bladder. Only a part of them, sometimes only the larger half, the quantity varying in different instruments, settle into the glass receiver. This important fact, so little recognised, should not be accepted without demonstration.

An instrument which Sir Henry Thompson has lately abandoned (Fig. 1) can be made to demonstrate exactly how the currents act upon the fragments in an evacuator which is unprovided with a catheter-trap to prevent them from re-entering the catheter. It is here selected because the peculiar form of this instrument makes it easy to fit a glass tube to it, so that we can see what takes place in the interior. Let a piece of glass tube, an inch in diameter, be inserted at the joint J J, between the bulb B and the catheter, to show what passes with the current from one to the other in either direction. If the end of the catheter be now placed in a suitable vessel of water containing fragments of coal of different sizes, while the bulb is alternately compressed and allowed to dilate, a continued stream of fragments will be seen rising from the vessel into the bulb, and then returning to the vessel, as they inevitably do to the bladder. The back-flow of débris can be still better watched if a glass tube be also substituted for the catheter, as in the figure.

But there is another important fact illustrated by this instrument. Fragments do not always stay in a receiver after they have been deposited there. When the glass receiver R of this evacuator is half filled with fragments, a part of these are easily carried back into the bladder or into the vessel. They are first lifted up from the receiver into the bulb, and then driven out through the catheter. For

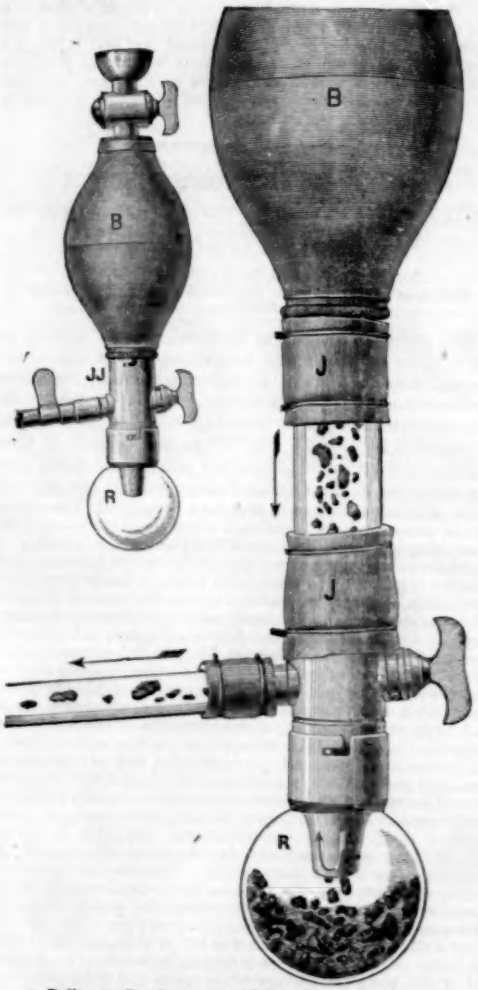
[1] Sir Henry Thompson says (Diseases of the Urinary Organs; Philadelphia and London, 1883), "The evacuating catheter to be attached to the aspirator should be as large as the urethra will admit; usually No. 15 or 16 of the English scale [26 to 28½ French] may be used without any danger. Sometimes No. 17 or 18 [30 and 31 French] are admissible; but such sizes are quite unnecessary for small stones, and may produce mischief; hence they are only to be used where the presence of a large stone demands corresponding instruments." Or, it might be added, to expedite the operation, when the urethra is large and healthy. The size of the normal urethra, according to Otis, is, if we except the meatus, 32 of the French scale. Clover's evacuating catheter was 21. Those now in use range from 26 to 31. Care, however, and often special skill, may be required to introduce safely the largest sizes; 31 is very rarely needed, and the French sizes 28 and 29 are generally the most convenient. For a final washing or sounding without anæsthesia, when it is desirable to give the patient the least discomfort, even so small a calibre as 26 is sometimes useful. Through a catheter of this calibre Mr. Teevan has removed calculi weighing six or eight hundred grains; but such cases should be regarded as showing what is possible, rather than as establishing a rule of practice. Here I may add that although no lithotrite compares in size with the larger tubes, it is yet true that long-bladed lithotrites, especially if they have the sharp extremity of the old instruments, are more difficult than tubes to introduce with safety. Although since 1878 my lithotrites have been made in three sizes, I have rarely had occasion to employ any other than the middle size.

[2] The specific gravity of hard coal is 1·375, that of a urate calculus is 1·340, and of a mulberry calculus 1·262.

though the orifice of this glass receiver is small and protected by a special trap, the current and débris pass out of it as well as into it. It could not have been foreseen that fragments would escape from a receptacle apparently so well arranged. But it will be found that in any instrument, if the bulb or catheter directs the current into the glass receiver, whether directly or obliquely, fragments are easily carried out again.

And the general result is little better if, to avoid stirring

FIG. 1.



B, Bulb. R, Receiver. J J, A joint.—These two figures, representing the same instrument, are intended to illustrate the fact that all evacuators return fragments to the bladder unless provided with some especial arrangement to retain them. The joint J J of the smaller figure is opened in the larger figure to receive a glass tube. Through this fragments are seen as they are drawn into the bulb and expelled from it. The glass evacuating catheter shows them again, on their way to and from the bladder. The receiver R shows other fragments in the act of being lifted by the current and returned to the bladder.

the fragments which lie in the receiver, the current is directed horizontally over the mouth of it instead of into it. Some of them then pass directly back and forth between the bladder and the bulb, over the receiver without falling into it. This defect can be shown in an instrument recently employed by Sir Henry at the suggestion of Weiss & Co.,[3] where the stream from the catheter passes horizontally through an empty chamber on its way to the bulb. As the stream enters it, its velocity is so diminished that fragments fall to the bottom into the receiver in greater number when the bulb is weak. Many fragments as usual are secured. But in order to be wholly effectual, the chamber intended to retard and break up the current by its size would have to be inconveniently large to give time to the floating débris entering on one side to settle into the receiver without passing further. The principle here involved is quite different from that of the evacutor represented in the above figure. This instrument is not unlike one formerly figured in THE LANCET,[4] but the valve and strainer which there act as a trap have been omitted, and, in consequence, not a few fragments escape back to the bladder.

In Weiss's evacutor again, some of the fragments which enter the bulb gather in the bottom of it, which is lower than its outlet, and where there is no receiver to collect them. The chief difficulty, however, is not that these fragments stray into the bulb, but that for want of a trap they are afterwards liable to escape out of it to the bladder.

This difficulty is not wholly obviated by placing a strainer across the mouth of the bulb to prevent the fragments from entering it, as has been done in some other evacuators.

(To be concluded.)

[3] THE LANCET, Jan. 7th, 1882.

[4] Sept. 24th, 1881, fig. 5.

ON MANGANESE IN THE TREATMENT OF AMENORRHŒA.

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AND
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WE are desirous of calling attention to the value of a very simple remedy in a very common complaint. For some time past we have used permanganate of potash with much success in the treatment of certain forms of amenorrhœa, and are satisfied of its value. Our observations have extended over a period of thirteen months, and we have now notes of sixty-nine cases. The majority occurred in hospital practice, but some were private patients. A small number remained under observation for a few weeks only, but the majority continued to attend for a much longer period; so that in some instances we have a complete record of the menstrual history for a year or more. In some cases the amenorrhœa was the cause of the patient seeking advice; in others its existence was mentioned incidentally, the patient suffering from some other complaint. Our cases are such as come under the care of the general as distinguished from the obstetric physician, and do not include those requiring operative interference. As a rule we refrained from making a vaginal examination, but with this exception our notes are complete. We have used the permanganate in two forms, first the pharmacopœial solution, and secondly the permanganate made into pills, each containing either one or two grains. Generally we begin with a grain three times, and then gradually increase the dose to two grains four times a day. Our most striking results have been obtained with the larger doses; a large dose sometimes succeeding admirably after the failure of a small one. Before commencing treatment we inquire carefully into the menstrual history of the patient, and as a rule give the remedy only for the three or four days immediately preceding the expected period, but should it fail to produce the desired effect we direct the patient to continue steadily taking it, and in some cases it has been taken continuously for nearly three months. In our experimental observations we have given the one drug only and have done nothing in the way of accessory treatment. Our most striking results have been obtained in young women between the ages of eighteen and twenty-five, who from some accidental or trivial cause, such as catching cold or getting wet, have "missed" once or twice after having been regular. The administration of one or two grains of permanganate of potash in pill three or four times a day for a few days

before the time of the expected period will bring on the flow almost to a certainty. In some instances the periods were brought on after the patient had ceased menstruating for over a year. In the case of country girls who have "seen nothing" for a month or two after coming to town the treatment has answered admirably. Often enough patients do not consult their doctor until they are "overdue," until the time of the expected period has passed by for some days. Even then the prompt administration of the permanganate will often bring on the flow at once, but should it fail to do so the treatment ought to be continued, and the patient will probably menstruate normally at the next monthly time. Generally our efforts are not crowned with success until the medicine has been taken for at least three or four days, but in some instances the permanganate acted with striking rapidity, the menstrual flow making its appearance after only two or three doses had been taken. It is not necessary to discontinue the treatment on the appearance of the menses; in fact we generally tell the patient to continue taking the pills three or four days longer, finding that it facilitates the flow. The permanganate often succeeds well after the failure of other remedies, such as iron, aloes, nux vomica, strychnia, pulsatilla, nitro-glycerine, and hot mustard baths. Sometimes, however, it is necessary to give it for six weeks or even longer before the desired result is obtained. In those cases where the patient has menstruated only once or twice, and has then entirely ceased for some months, our treatment answers well; the menstrual function is re-established, and thenceforth proceeds normally at every successive monthly period. In some cases there was no actual amenorrhœa, but the flow was scanty, lasting perhaps only a single day, or it may be only a few hours. Here the administration of the permanganate prolonged the flow, and even in some instances when it had ceased brought it on again.

In girls of about fifteen or sixteen, who have never menstruated at all, the permanganate, as might be expected, is not so certain in its action; but even here it not infrequently acts promptly, bringing on the flow at once. In some cases where the general health was bad, and the permanganate had failed, we suspended treatment for a time, and sent the patients into the country for a month. On their return we gave the permanganate a second trial, and it succeeded at once. We have, however, sometimes failed to bring on the menstrual flow even when the patient was in fairly good health, and when there were the usual indications of puberty.

It is not only in the case of young women that manganese is so useful, it succeeds almost equally well with women between thirty-five and forty, who, as the result of many pregnancies and much suckling, have ceased to be regular. Here, for example, is a typical case. A married woman came to us complaining that she was never regular. She had had nine children in as many years, and rarely saw anything more than once between her pregnancies. She had been suckling for eight months, and had not been poorly for seventeen months—the nine months she had carried and the eight months she had suckled. She was not in the family-way, but said she expected she would be soon if she weaned the baby. She did not know when she ought to be poorly, and had given up all expectation of seeing anything. She was ordered two one-grain permanganate of potash pills four times a day, and came on poorly a fortnight after, the first time for seventeen months.

We need hardly say that before treating the amenorrhœa care should be taken to see that the patient is not pregnant, although we are satisfied that the permanganate given in the dose we recommend has no power to produce abortion either in the early or late stages of pregnancy. We find that manganese fails to induce the flow when the amenorrhœa is due to advanced phthisis. But in some cases of arrested phthisis the treatment was successful, and the patient, after a time, under the influence of the permanganate, menstruated freely and at regular intervals. In several instances patients informed us that the pills had proved of value in curing "whites" of long standing. As a rule the permanganate is taken without difficulty, but patients much prefer the pills to the solution. The solution is peculiarly disagreeable to take, and in some cases produces nausea and even vomiting. Patients frequently complained after taking the pills of a heavy persistent pain over the upper part of the sternum, "as if something had stuck there and would not go down." This was not due to the drug being given in the form of a pill, for the same complaint was made when the same dose was given in solution. One patient said the pain was of a burning character, and another said it was like heartburn. A girl of sixteen, to whom two two-grain permanganate of potash pills were given four times a day, said the pain, "like a lump at the chest," came on immediately after each dose, and was so intense that she had to go to bed for two hours.

That the effects we have described are due to the manganese, and not to the potash in the salt, is shown by the fact that manganate of soda and binoxide of manganese are equally efficacious in the treatment of amenorrhœa. The manganate of soda was given in two-grain pills, two four times a day; and the binoxide in four-grain pills, one four times a day. It may be thought that the manganese acts by improving the condition of the blood, but this is not the case. The treatment succeeds equally well in the plethoric and in the anæmic. Given in cases of chlorosis, the permanganate not infrequently brings on the period without in any way improving the anæmia.

A CASE OF ADDISON'S DISEASE,

WITHOUT TUBERCULOSIS OF THE SUPRA-RENAL BODIES AND WITHOUT AFFECTION OF THE SEMI-LUNAR GANGLIA.

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THE present pathology of Addison's disease assigns its cause "to be a "tubercular destruction of the supra-renal bodies," associated with "a general pigmentary deposition in the rete mucosum, and a remarkable form of progressive asthenia, which sooner or later ends in death."[1] A similar explanation is given by Drs. Wilks and Moxon in their "Pathological Anatomy," but here more stress is laid upon the connexion of the caseous degeneration of the adrenals with tuberculous disease of the lungs. Again, Dr. Greenhow, in his monograph on Addison's Disease, p. 25, where he is discussing the morbid process which takes place in the supra-renal capsules, lays it down that it is always identical, and "consists primarily in their infiltration by an inflammatory exudation of low type, which destroys the normal structure of the organs, and finally itself undergoes caseous degeneration." And in his paper on Addison's disease read before the International Medical Congress, 1881, he refers "most of the more prominent symptoms of the disease to some morbid condition of the neighbouring nerves," and further states that "it is almost certain that these symptoms are caused not by impairment of any special function of the supra-renal capsules themselves, but by injury to the important branches of nerves which pass into the capsules, and of the ganglia and plexuses in their immediate neighbourhood." Hence it would seem that while some pathologists conceive that the inflammatory lesion suffices to develop the symptoms, others believe that, though the tubercular condition is always present, the symptoms are due to some affection of the neighbouring nerves and ganglia. Yet the following case tends to show that, on the one hand, tuberculosis of the supra-renal bodies is not required to cause Addison's disease, and, on the other, that the symptoms of this malady may exist without any apparent lesion of the adjacent sympathetic ganglia. The case is especially noteworthy, because of (1) the complete absence of caseation and of tuberculosis; (2) the atrophic condition of the supra-renal bodies; (3) the correspondence of the smaller supra-renal body to the larger ganglion. And, I conclude, from a consideration of the morbid appearances, that the pathological element of this disease is to be sought in the central part of the supra-renal capsules themselves.

Mary A. C——, aged forty-eight, was admitted into the Westminster Hospital under the care of Dr. Fincham on March 31st, 1882. Her father's brother suffered from gout, one of her sisters died of phthisis. The patient is a married woman, and has had eight children. The menopause took place four years ago. She has had no previous bodily illness, but in 1880 had some great domestic trouble; has not suffered from exposure, privation, or injury. For the past year she has been complaining of weakness and has become much worse in the course of the last three months, during which period she has been losing flesh. Six weeks

[1] Bristowe's Medicine, Fourth Edition.

ago she began to suffer from headache, which has continued ever since. The darkness of the skin commenced to show itself about four weeks ago, or at least was not noticed before. The above symptoms became intensified in the beginning of March, and were accompanied by fainting fits, constipation, and nausea. During the two weeks previous to her admission the loss of strength and flesh was very rapid. She then began to vomit her food, and has retained very little nourishment ever since. The patient has been laid up in bed for one month. On admission it was found that she was very weak, and somewhat emaciated, with an anxious, drawn expression and sunken eyes. There was a general duskiness of tint over the face and the whole surface of the body. On the back and right side of the neck, and on both elbows, were a number of circular dark-brown patches; the areolæ were of a dark-chocolate colour, and on the mucous membrane of the left cheek was an irregular dark patch about the size of a sixpenny-piece. The pulse was small and weak, and the heart's action rapid but regular. There were no abnormal auscultatory signs in the thorax. Urine acid, sp. gr. 1020; no albumen. Weight 6 st. 12 lb. 10 oz. Patient constantly vomited. She was ordered liquor arsenicalis, five minims, after food. Between this and her death the patient vomited all nourishment taken by the mouth, and peptonised food was administered per rectum. She became rapidly weaker, and died April 7th. Her weight taken a few hours before death was 6st. 3lb. 10oz.

Necropsy made by Dr. HEBB, *nine hours after death.*—Body somewhat emaciated, but there was a considerable amount of adipose tissue within the abdominal cavity; slight rigor mortis; the viscera were quite warm; there was a subconjunctival hæmorrhage of the left eye. The blood was quite fluid, and contained an unusual quantity of free liquid fat. There was no staining by blood colouring matter of the serous or other tissues. There was not a trace of caseation in any part of the body. The skin generally was bronzed, but there were patches of deeper pigmentation in the following situations: around the nipples, in both armpits, in Scarpa's triangles, below both knees, over against the lower cervical region an irregularly oval area about six inches by four inches, and on the mucous membrane of the mouth and of the vulva. Brain weighed 50 oz.; membranes and nervous tissue normal. The pleuræ were quite smooth and shining. Both lungs were crepitant throughout. Heart weighed 6½ oz., the valves were competent; the aortic measured 2·75 in., the mitral 3·50 in.; the muscular tissue was firm but of a brownish colour. The pericardium was normal. The liver weighed 50 oz., normal. Spleen 2½ oz., soft. Kidneys each 4½ oz., congested, otherwise normal. The supra-renal bodies weighed—right, 28 gr.; left, 19 gr.; they retained their shape, were of a reddish colour, and of a softer consistence than usual; on section the internal pearly-white layer was found to be absent. The abdominal sympathetic ganglia, especially the left semilunar ganglion, seemed larger than usual. The stomach contained several ounces of a pultaceous material of a malachite-green colour. Both ovaries were shrunken, and from the os uteri poured a glairy white discharge, otherwise these viscera were normal.

Microscopical examination of the semilunar ganglia failed to discover any lesion of the sympathetic nerve cells, although comparison with several normal semilunar ganglia suggested that there might be increase of the connective tissue element. The bloodvessels were certainly larger and more numerous.

Torrington-square, W.C.

MEMBRANOUS POLYPUS OF THE CERVIX UTERI.

By CHARLES GIBSON, M.D.,

LECTURER ON THE DISEASES OF WOMEN ETC. IN THE UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE, CONSULTING PHYSICIAN TO THE NEWCASTLE DISPENSARY, ETC.

IN the body of the uterus there are principally two forms of benign polypus found—viz., the soft or mucous, and the fibrous or muscular, which may be regarded as an extension of the proper tissue of the uterus, covered by a corresponding extension of the lining membrane of the organ. In the neck of the uterus one other well-recognised form is superadded—viz., the glandular, principally constituted by enlarged glands of Naboth. In addition to these, however, several varieties are recognised: the fibrinous, either from a coagulum in utero, or from an aborted ovum; the vascular, from varicosity of the submucous bloodvessels; the placental, which again results from detained and variously altered placenta; the fatty polypus may be regarded as a degenerated fibroid.

The polypus of which this paper takes special cognisance does not belong to any of these varieties. Yet it is strictly a benign polypus, springing from the internal surface of the cervix uteri. Some years ago I saw a patient who had been out of health for many months. Her age was about fifty. She was stout, but there was a sustained feeling of indisposition in the patient, and exertion with her soon produced fatigue. This lady was keenly susceptible to the influence of cold, and when acted upon by it, she commonly became affected with cervical uterine leucorrhœa. When this patient came under observation there was present aching of the lower part of the back, around the hips, and down the thighs; but there was no other localised complaint, excepting only slight tenesmus on defecation and micturition. The grand climacteric had been passed, but the later catamenial periods were marked by much discomfort, even by suffering, and by great irregularity in the character and in the quantity of the discharge. On examining the uterus per vaginam with the finger, the os uteri was found to be much dilated, and immediately within it a rounded body was reached by the examining finger. The cervical walls were soft and even. No blood issued on freely touching the intra-cervical foreign body. By the aid of the vaginal speculum the presenting tumour was seen to be evenly rounded in outline, and to fill completely the canal of the cervix uteri. Nothing like blood or pus covered it. On pressing the uterine probe upon this dark-coloured body it became deeply indented, and by onward pressure it receded within the cervical canal. On withdrawing the probe the tumour resumed its former site and appearance. Laminaria tents were passed through the cervical canal, and free dilatation of it was effected. And now, on making digital and ocular examination, the tumour was nowhere to be found, and no bearing down on the part of the patient and no pressure on the hypogastrium could force the growth again into view. The finger, indeed, could feel an uneven condition of the anterior wall of the cervical canal, but no other abnormality could be detected. The cervix was allowed to contract upon itself again, and on the fourth day after the examination just referred to the tumour was again found in the cervical canal. It was now carefully examined and found to have a broad attachment to the anterior cervical wall, and to be gradually lost in the surrounding parts. Excepting for the points of attachment the tumour did not appear to have, exactly, any of the characters of the polypus formed by enlarged Nabothian gland. It was concluded then that the abnormal growth was nothing but a rounded fold—a prolapse, in fact—of hypertrophied cervical mucous membrane. On this assumption a line of treatment was determined upon and carried out. The wall of the cervical canal, after dilatation, was freely swabbed with the stronger solution of perchloride of iron; and a dossil of lint, saturated with glycerine, was placed in the canal for twenty-four hours. This operation was repeated on three other occasions, after which neither probe nor finger could find a vestige of the tumour. On seeing this patient three weeks after the last application the cervical canal was found to be free from abnormal growths, and the discomfort and tenesmus formerly felt had quite disappeared.

About two years ago this patient again came under my observation with symptoms nearly identical with those already referred to. Some persistent leucorrhœa, however, was superadded. On examination a tumour was found similar in many particulars to that which had been observed before. It was, however, much larger, and hung down from the uterine orifice into the vagina. It had the form of a pear, and was attached by its pedicle to the anterior wall of the cervix uteri. The growth was now summarily dealt with: a loop of fine wire, passed through a silver tube, was carried over the polypus, as nearly as possible to the points of its attachment to the cervical wall, and tightened; then, with a seesaw motion of the wire the attaching textures were cut through, and the tumour was removed. Although there was almost no bleeding, the stronger solution of perchloride of iron was freely applied to the cut surface as a matter of security. In two days the patient was well, and has continued so up to the present time. On examination of the tumour after maceration in a solution of common salt, it was found to be pear-shaped,

as before removal, its walls enclosed, and were held together by a tolerably firm connective tissue, and yet by manipulation the envelope could be flattened out, a nodule only of the connective tissue, more dense than the rest, remaining on the surface of the envelope after the other portions had been unfolded.

In another case of like nature, the tumour was small but easily recognised, the cervical canal being large and the uterus itself very low in position. The patient was still menstruating, the periodic discharges, however, being long continued each time, and very profuse. In this case the stronger solution of perchloride of iron was repeatedly applied to the abnormal growth, and to the circumjacent mucous membrane. These applications were followed by the introduction of an intra-uterine stem pessary, and vaginal injections of cold water were employed. The pessary was worn for some months. The result of this treatment was entirely satisfactory.

This affection is produced, I think, by engorgement of the mucous membrane of the cervix uteri. It clearly has no connection with the dilatations and contractions of the cervix which belong to parturition, neither of the patients referred to having borne children. The mucous membrane, however, becomes relaxed by recurring catamenial plethora. The relaxed membrane folds upon itself, tenesmus is thence set up, as upon a foreign body in the cervical canal, and the loosened membrane is gradually forced downward. Then exalted nutrition of the mucous membrane and of the submucous connective tissue follows upon the recurring plethora. The hypertrophied textures offend more and more as their growth increases, and the polypoid character of the tumour, as it extends beyond the uterine orifice, becomes marked more and more distinctly.

The literature of uterine affections does not present, so far as I am familiar with it, any well-marked cases of the kind now delineated. Doubtless such cases have often occurred before, and will often occur again. It is highly desirable, therefore, that these morbid outgrowths shall henceforward be recognised by gynæcologists, and their etiology and pathology securely established.

ANALYSIS OF THIRTY-NINE CONSECUTIVE MAMMARY CASES

OPERATED ON DURING SEVEN YEARS IN THE WESTERN INFIRMARY, GLASGOW, FROM NOVEMBER, 1875, TILL NOVEMBER, 1882.

BY ALEX. PATTERSON, M.D., F.R.C.S. ED.

ON Nov. 1st, 1875, three small wards in the Western Infirmary were opened and placed under my charge. Collectively they contained nineteen beds, six only of which were for females. eighteen, the male ward, with side room, twenty patients. In addition to the foregoing list there was the usual number of chronic mammary abscesses with sinuses, all of which terminated satisfactorily. Average age of patients at time of operation, forty-eight years four months. Average stated duration of disease at the date of operation, omitting case of Mrs. B——, which was a secondary scirrhus, about twenty months, and leaving out one male case, seventeen months. Right side affected in the proportion of twenty-two to seventeen left. Average number of days in hospital twenty-eight and a half; deducting the number of days before operation the average is twenty-five days from date

Date of admission.		Name of patient.	Age.	Stated duration of the disease.	Side.	Date of dismissal.	Nature of disease.	Total number of days in hospital.	Days in hospital prior to operation.	Result of operation.
1875	Dec. 27	Mrs. R.	43	4 months	Left	Feb. 19	Scirrhus	24	4	Recovery
1877	June 11	C. M.	67	12 months	Left	Jan. 30	,,	20	2	,,
1878	Feb. 23	Mrs. M'F.	40	3 months	Right	March 23	,,	29	4	,,
,,	March 16	Mrs. M.	57	4 months	Left	April 15	,,	31	12	,,
,,	July 17	Mrs. D.	36	15 months	Right	Sept. 6	,,	51	7	,,
,,	Sept. 19	Mrs. W.	38	7 months	Left	Oct. 17	,,	28	5	,,
,,	Oct. 12	Mrs. C.	47	7 months	Right	Oct. 25	,,	14	0	,,
1879	Jan. 22	Mrs. G.	32	18 months	Right	Feb. 13	,,	23	3	,,
,,	Jan. 23	M. F.	21	2 years	Right	Feb. 11	Aden. tumour	19	0	,,
,,	Feb. 5	Mrs. B.	58	5 years	Right	March 1	Scirrhus	25	3	,,
,,	Feb. 25	H. S.	38	8 months	Left	March 6	,,	10	2	,,
,,	April 30	Mrs. M.	40	16 months	Left	May 19	,,	20	3	,,
,,	June 24	Mrs. W.	50	8 months	Right	July 11	,,	18	1	,,
,,	July 6	Mrs. D.	50	14 months	Right	Aug. 1	,,	27	3	,,
1880	Feb. 3	Mrs. K.	40	7 months	Right	Feb. 24	,,	22	2	,,
,,	Feb. 24	Mrs. M'L.	60	12 months	Left	March 12	,,	17	1	,,
,,	Dec. 1	Mrs. R.	49	3 years	Left	Dec. 28	Fib. cyst. sarc.	28	7	,,
,,	Dec. 7	Mrs. M'G.	53	5 months	Right	Dec. 21	Scirrhus	14	1	,,
,,	Dec. 30	A. M.	53	3 months	Right	Feb. 4, '81	,,	36	9	,,
1881	Jan. 4	Mrs. H.	45	2 years	Left	March 1	,,	57	4	,,
,,	March 26	Mrs. R.	53	1 year	Right	May 31	,,	67	0	,,
,,	April 1	S. M'K.	65	4 months	Right	May 12	,,	42	1	,,
,,	April 13	Mrs. P.	50	4 months	Right	May 6	,,	24	2	,,
,,	April 22	M. M'K.	44	6 years	Left	May 23	,,	32	4	,,
,,	June 1	Mrs. M'F.	65	4 years	Right	June 28	,,	27	1	,,
,,	June 27	Mrs. M'V.	61	3 years	Left	July 18	,,	21	3	,,
,,	July 2	Mrs. L.	53	1 year	Left	July 29	,,	27	2	,,
,,	Nov. 28	John M'D.	66	10 years	Left	Dec. 31	,,	33	3	,,
,,	Dec. 12	Mrs. M'N.	51	4 years	Left	Jan. 7, '82	,,	28	2	,,
,,	Dec. 21	Mrs. R.	51	4 years	Right	Jan. 8	,,	20	1	,,
1882	Jan. 21	M. C.	45	14 months	Right	Feb. 24	Aden. sarcoma	34	10	,,
,,	April 10	M. H.	40	4 months	Left	May 30	Scirrhus	50	1	,,
,,	April 18	M. T.	40	12 months	Right	May 10	,,	22	1	,,
,,	May 13	Mrs. C.	50	2½ years	Right	June 5	,,	23	5	,,
,,	July 13	Mrs. M'E.	34	7 months	Right	Aug. 4	,,	22	1	,,
,,	July 29	Mrs. J.	46	2½ years	Right	Aug. 24	,,	26	3	,,
,,	Aug. 30	Mrs. R.	45	9 months	Right	Oct. 13	,,	44	0	,,
,,	Sept. 14	C. C.	66	2½ years	Left	Oct. 13	,,	29	4	,,
,,	Oct. 18	Mrs. M'D.	45	1 year	Left	Nov. 4	,,	17	2	,,

On Jan. 4th, 1881, through the kindness of the managers, two exceedingly handsome new wards in the Freeland wing were placed at my disposal; the emale ward accommodates of operation to dismissal. Pain in many cases absent from first observation of disease until time of operation. Heredity, retraction of nipple, involvement of axillary glands, and

some other points, are not recorded in a sufficient number of cases to admit of reliable averages being made.

The practice carried out in the foregoing series of cases was as follows. The operations were slowly performed. After separating the skin from the gland tissue, including the tumour, an incision was made around the superior half of circumference down to the fibres of the great pectoral muscle, and the mass torn, not dissected, off the muscle; affected axillary glands were always removed. All bleeding points observed were tied, and ordinary silver sutures were used in bringing the edges of the wound together. The arm of the side operated upon was thrown across the chest and fixed there, with the object of relaxing the skin and great pectoral, and keeping the wound as nearly as possible free from disturbance. This practice was followed until the woman left the hospital. When any tendency to bronchitis existed the patient was placed sitting up in bed, or as nearly so as possible, immediately after the operation. So far as I can learn a fatal termination in mammary operations occurs either from pneumonia, pyæmia, or erysipelas, or from exhaustion. By operating under the spray and dressing antiseptically, pyæmia may be prevented; the dragging which tends to erysipelatous inflammation may be in most cases avoided by fixing the arm in front of the chest, and pneumonia may be averted by keeping the patient as much as possible in the sitting posture from the date of the operation, as well as by carefully avoiding draughts and seeing that the windows next to the woman's bed are kept closed during the prevalence of an east wind. The cases were all treated antiseptically, and only four or five required any stimulants. The most promising cases of scirrhus for removal—that is to say, those in which the longest interval of good health may elapse before the return of the disease—are those met with in spare women of advanced age, with a slow pulse, and in whom the tumour has grown slowly. The more rapidly the growth has taken place, the speedier will be the return after operation. Fat wheezy patients are, in my experience, the most unpromising subjects, and require the greatest care; they are, in fact, amongst the worst class of patients for any surgical operation. No case of scirrhus existing in both mammæ at the same time has come under my observation. I am distinctly of opinion that scirrhus of the mamma is never a purely local disease.

Glasgow.

BULLOUS ERUPTION OF A PECULIAR CHARACTER.

BY RICHMOND LEIGH, M.R.C.S. ENG.,
SURGEON TO THE ST. GEORGE'S HOSPITAL FOR DISEASES OF THE SKIN, LIVERPOOL.

M. W——, aged thirty-three, very healthy, was affected by a peculiar eruption five days after parturition. It appeared as bullæ of irregular shape and size, varying from a quarter of an inch to about one inch in size. It was not preceded by redness, pain, or other sign or symptom. But for the absence of redness, the appearance was that of a blister, for which it was taken by a surgeon who saw the case early. As the bullæ burst, there was some slight rawness from the loss of epithelium, but not beyond the margin of the bullæ, and also some slight soreness and purulent discharge from the friction of the clothes, but no pain existed from other cause throughout the course of the disease. The height of the eruption was reached about three or four days from its commencement, and fresh bullæ appeared at intervals in its course for over a week. After the discharge of the contained fluid the bullæ dried up gradually with little reddening, rawness, or discharge, except where irritated by rubbing. Accompanying the eruption was an eczematous affection of the eyes and lips, which remained after the disappearance of the former. The trunk was the only part affected, and with the exception of a portion of the buttocks, only on the anterior aspect, which was irregularly covered by the eruption from the neck to the groins. The duration of the complaint was about fourteen days. It was probably of neurotic orgin, the result of "cold," but no nerve region was specially marked out. There was no fever, and the general health was unaffected, except that there was some little debility more than usual. No history of syphilis was elicited, and the woman had had no abortions, or stillborn or premature children. She was married very early, soon after the age of fourteen, and had had eleven children before the present one. The milk appeared on the third day, without much febrile disturbance.

The treatment was general; iron and quinine on account of the debility, and vaseline locally.

Park-road, Liverpool.

PENETRATING WOUND OF THE ORBIT; BULLET LODGED IN THE BRAIN.

BY A. EMRYS-JONES, M.D.,
SURGEON TO THE ROYAL EYE HOSPITAL, MANCHESTER.

ON Monday, Nov. 6th, I was summoned in a great hurry to see a case in consultation with my friend Mr. W. Armstrong, of Harpurhey, who informed me that a boy, aged fourteen, a few hours previously had been handling a revolver, the contents of which had been discharged into the orbit, and most likely into the brain. The boy was evidently in pain, and it was deemed advisable to give him a few drops of chloroform before proceeding to make an examination; but just as he took the first few sniffs he struggled violently, and then fell into a state of collapse, and, in spite of all that could be done, he did not breathe again, although the action of the heart kept up for some time.

On Nov. 8th we made a post-mortem examination, and found the following appearances:—The eyeball was extensively ruptured, and internally a large irregular opening, about half an inch in extent, at the junction of the ethmoid and sphenoid bones, and continuous with the opening a large hole extending through the cerebral convolutions to within an inch of the posterior boundary, where we found the bullet.

The track was filled with blood, and the débris of bone carried along with the bullet. There was extensive hæmorrhage into the adjacent parts and the ventricles. We found all the other organs healthy.

Manchester.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

LARGE AXILLARY ANEURISM; LIGATURE OF THE SUBCLAVIAN ARTERY; RECOVERY.

(Under the care of Sir WM. MAC CORMAC.)

FOR the following notes we are indebted to Dr. W. A. Duncan, house-surgeon.

The patient, a man aged forty-nine years, was admitted on Aug. 21st, 1882. He had been healthy, and had followed the occupation of a carpenter. He was of very stout habit of body and florid complexion. Formerly, for six years he had been a soldier, and served during the Crimean campaign. At Scutari, in 1856, he suffered from an attack of inflammation of the lungs, for which he was bled and cupped. In 1857 he had a chancre and bubo, and some weeks later his body was covered with a rash. He remained well till 1875, when he strained his right arm at his work, and lost the use of it for a time. The power was gradually regained, but a small lump about the size of a walnut was soon discovered in the right axilla. Of this he took little notice, as it occasioned him but trifling uneasiness. A month before admission he again strained the arm, and the tumour now began to increase much more rapidly, especially during the week previous to admission; the skin over it became ecchymosed in places, and the man suffered some pain and numbness down the arm, which became considerably swollen.

When he first came under observation at the hospital

a large pulsating swelling occupied the antero-lateral aspect of the chest. It could be traced up beneath the pectoral muscles as far as the second portion of the axillary artery. The brachial artery was apparently not involved. The tumour filled the armpit, pushing the arm outwards and the shoulder upwards. Behind it reached to the posterior fold of the axilla. It reached forward as far as a vertical line drawn from above the centre of the clavicle to the nipple; its lower limit corresponded to a horizontal line a little below the nipple. The tumour was soft and rounded, pulsation strongly distensile. A bruit could be heard over the posterior half. The tumour was freely movable over the deep structures in an antero-posterior direction and the skin over it was nowhere adherent. The pulsation was stopped, and the sac partially emptied, on pressure upon the subclavian artery. The radial pulse was weaker and the arm cooler on the affected side. Urine normal. Heart sounds feeble, no murmur audible.

As treatment by pressure was clearly inapplicable, and speedy interference desirable, the ligature of the subclavian artery was determined upon. The operation was performed on August 24th. An incision was first made two and a half inches long parallel to, and corresponding with the central portion of, the clavicle and half an inch above it. From the inner extremity of this wound a further incision was made obliquely upwards along the outer border of the sterno-

mastoid muscle. By this means great additional space was gained. A large external jugular vein, much distended, lay in the way, and as it impeded the further steps of the operation, it was divided between a double ligature. The omo-hyoid muscle was then exposed after a little dissection, and afterwards the last cord of the brachial plexus, close below which the artery could be plainly felt and seen. The sheath was carefully opened, and a thread of thick catgut passed round the vessel, taking care to disturb it as little as possible. The high position of the shoulder, and the fatness of the man, made the wound a very deep one, but the operation was quickly completed without much difficulty. No vessel required ligature except the external jugular vein. There was practically no bleeding. The wound was washed out with carbolic solution (1 in 20), and a large drainage-tube passed to the deepest part, the edges were brought together with sutures, and an antiseptic dressing was applied. The right arm was swathed with cotton-wool, and kept in place by a flannel bandage.

After the operation the patient was sick several times, and complained much of thirst. Some pain and numbness were felt in the limb but the temperature did not fall. The right pupil became smaller than the left.

On August 27th, three days after the operation, the wound was dressed for the first time, the dressing contained only some serous discharge. The wound appeared to be well united. The drainage-tube and all the sutures were removed.

On August 31st, seven days after operation, the wound was redressed; there was no discharge, and the cicatrisation appeared almost complete; the antiseptic dressing was left off. The patient now felt quite comfortable and was going on well in every respect. The aneurismal sac was steadily contracting and there had been no return of pulsation in it.

The temperature reached 100° F. the day after the operation, but for the most part it varied between 98·4° and 99·4°; the pulse was usually about 80. The patient's only complaint was at first of the heat and inconvenience of the dressings about the neck. The wound united by first intention, except where the drainage-tube lay, without visible reaction, and, as soon as the tube was removed, this channel closed directly; the catgut noose around the vessel must have been completely absorbed.

On October 4th, forty days after operation, the notes report an uninterrupted improvement; the large aneurismal sac had diminished a half in bulk and was quite hard. It was believed faint pulsation could be felt in the brachial, but neither in this artery nor those of the forearm could any pulse wave be afterwards felt.

The man since he left the hospital has presented himself from time to time and his condition leaves nothing to be desired. The woodcut, copied from a photograph kindly taken by one of the St. Thomas's students, Mr. West, represents the dimensions of the swelling and the position of the incision made in order to reach the subclavian artery.

GUY'S HOSPITAL.

CASES OF ACUTE NECROSIS.

(Under the care of Mr. BRYANT.)

CASE 1 (from notes taken by Mr. Tresidder), *Multiple Necrosis, after Scarlet Fever, of Clavicle, Tibia, and Ulna; Sequestrotomy; Cure.*—John S——, aged three, was admitted on May 21st, 1881, into Lydia ward. He was the youngest of eight children, none of whom, except himself, had enlargements of the bones, and he had been always a healthy child until four months before admission, when he had scarlet fever with dropsy, and he had not since been quite well. First an abscess formed over the right tibia, and was opened; then, five weeks before admission, an abscess formed on the right clavicle, and two weeks later another on the left ulna.

On admission the sternal end of the clavicle was much thickened for an inch and a half. There was a sinus covered over with a scab, from which a thick creamy pus exuded, and the sterno-clavicular joint was diseased. Just below the bone there was an irregular lobulated mass, like a piece of fat, under the skin. The right tibia was much thickened throughout the whole diaphysis, and the dead shaft was felt through three places. The left ulna was also thickened, and there were sinuses leading to diseased bone.

On June 3rd the wound over the tibia was enlarged, and a thick layer of new bone was cut through, and a larger sequestrum, about three inches long, was removed, besides several pieces; in fact, nearly the whole of the shaft of the bone. From the lower end of the wound a piece an inch long, including the whole thickness of the bone, as well as the epiphysial end of the shaft, was removed.

The child improved much in condition, and in a fortnight the wound was almost healed; but a few small spicules of bone came away.

On July 30th, under an anæsthetic, the sinus over the ulna was enlarged, and a sequestrum comprising the greater part of the diaphysis was removed. The necrosed clavicle was also taken away.

On August 27th the wound over the clavicle was quite healed, and on September 12th the wound over tibia was almost healed. There was good movement in the ankle, and no pain in the swelling here.

On November 28th general health was fair. The wound over tibia was still not quite healed. Recommended to go out and return if any unfavourable symptoms came on.

On January 9th, 1882, the tibia wound apparently closed.

On June 1st the child was seen by Mr. Bryant, when all the bones were quite sound. The perished shell of bone in each case had contracted to its normal dimensions.

CASE 2. (From notes taken by Mr. Wilson.) *Acute Necrosis of Upper End of Tibia; Suppurating Knee-joint; Sequestrotomy; Incision of Joint; Healing.*—Fredk. W——, aged eighteen years, a carman, was admitted on Feb. 27th, 1881. About three weeks before admission he knocked his left leg against a cart-wheel.

On admission there was an abscess over the inner tuberosity of the tibia and above the tubercle. There was some fulness of the capsule of the joint, and the lower third of the femur felt larger than on the other side, but there was no tenderness.

On February 24th the abscess was opened and a large quantity of pus mixed with blood exuded, and next day a back splint was put on.

On March 9th an incision was made on the inner side of the joint, and a week later, under an anæsthetic, and after an Esmarch's bandage had been applied, an incision was made and several pieces of necrosed bone were removed. There was acute suppuration of the head of the tibia and an abscess cavity in the head of the bone. Free incisions were made to ensure free drainage, and the leg put upon a back splint. The patient passed a good night after the operation, and the wounds began to heal at once.

On April 9th an incision was made just below the inner tuberosity of the tibia, and a large quantity of offensive pus let out.

The wounds have progressed favourably towards healing. The wound was probed, and a small fragment of necrosed bone was detected on July 27th.

On August 5th a Thomas's splint was applied.

Two small splinters of bone were removed on August 9th, and by November 16th several small pieces of bone had come away. Two sinuses remained unhealed. The patient left, and was to report himself in about a month's time.

NEWCASTLE-ON-TYNE INFIRMARY.

LOCOMOTOR ATAXIA; SEVERE LIGHTNING PAINS; LEFT SCIATIC STRETCHED; MARKED RELIEF.

(Under the care of Dr. DRUMMOND and Mr. PAGE.)

FOR the following notes we are indebted to Mr. James Limont, senior house-surgeon.

R. R——, aged twenty-three, a fisherman, was admitted for shooting pains in the legs and staggering gait. The patient stated that he had been greatly exposed to cold and wet during the past eleven years, and that he had frequently slept in trousers saturated with salt water. His habits had been very intemperate, and he had suffered from syphilis. In the summer of 1881, seven months before admission, he began to complain of pains in both legs, especially the left; subsequently he lost power in the lower extremities, and failed to control their movements properly.

As regards his family history, it may be stated his mother died twelve years ago of a tumour in the brain; one sister died of consumption. The father is still living and healthy.

On admission the man exhibited the typical features of locomotor ataxia. The ataxic gait was most characteristic; he staggered and fell whenever he attempted to walk with closed eyes, and was quite unable to stand when the eyes were shut, even though the feet were widely separated. He complained bitterly of the lightning pains, and had the girdle sensation well-marked. Analgesia was present in patches, and retarded sensibility was very marked in the legs (occasionally twenty-three seconds elapsed before a prick of a pin was discovered). The superficial skin reflexes and the knee-jerk were entirely absent. His sight was dim, the ophthalmoscope revealing pronounced syphilitic choroiditis.

On March 7th, about five weeks after admission, as the pains still continued very severe, Mr. Page cut down upon and stretched the left sciatic nerve. The operation was done antiseptically.—On the 15th the wound was entirely healed, and the patient expressed himself as greatly relieved of the pains in the left leg.—On the 30th he left the hospital quite relieved of the pains in both legs, but in no other way changed.

THE Essex and Chelmsford Infirmary has received £100, as a donation from Mr. Arthur Pryor, through the Christmas offertory at Widford.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Cirrhosis of Liver.—Cancer of Œsophagus.—Lympho-Sarcoma.—Larynx from a case of Tubercle.—Ulcerative Endocarditis.—Heart Disease.—Fibrinous Concretion on Pleura.—Lardaceous Disease of Liver.—Vesical Polypus.—Rickets in a Baboon.

THE annual meeting of the above Society was held on Tuesday last, January 2nd, Dr. S. Wilks, President, in the chair. For the first hour the ordinary business of the Society was transacted, and during this time the ballot box was open and in the charge of Dr. Edmunds and Mr. Eve, scrutineers. The last half hour was devoted to the special business of the annual meeting, which is reported elsewhere.

Dr. ANGEL MONEY showed a specimen of Cirrhosis of Liver from a child, aged eight, who suffered from ascites for ten days before death. She had stayed at a beer-shop for two months when three years old, and on her return home it was found that she had acquired a taste for alcohol. There was no history of syphilis. The liver weighed 19 oz. The amount of fibrous overgrowth was very excessive. There was no fibroid overgrowth elsewhere. The history justified the belief that the cause of the disease was alcohol.—Dr. S. WILKS said there had been two or three similar specimens shown recently from quite young children in whom there was a history of drink, although in many others there was no such history.

Dr. NORMAN MOORE exhibited four specimens:—1. Carcinoma of Œsophagus, a carcinoma affecting the whole middle part of the Œsophagus. The new growth infiltrated the whole wall, and had caused a stricture just admitting a large probe. The œsophagus was adherent to the lung, and at the adhesion its wall was perforated, so that any food which passed the stricture might enter the lung. The lung at this point was not gangrenous, but was simply pneumonic. The distribution of the secondary masses of new growth was interesting. The stomach was not affected, but the small intestine had several firm, whitish constricting masses, of precisely the same relations to the tube as that in the œsophagus. There were numerous secondary growths in both lungs, and one in the outer wall of the left ventricle. The liver, spleen, mesenteric glands, and both kidneys contained numerous masses of the same. The growth was a scirrhous carcinoma, and the secondary masses were all of firm texture. The patient was a man aged fifty-six. He had symptoms of dysphagia in May, and died in December. Out of twelve cases of carcinoma of the œsophagus examined at St. Bartholomew's since 1867 all were males. In six the lower end was the seat of the growth, and in five the middle of the œsophagus. In four cases secondary growths were found in the lungs. Exhaustion was the commonest cause of death. Ulceration into a vessel occurred in two cases, gangrene of the lung in one, and fatal pleurisy in three. The ages of the patients were from thirty-six to fifty-eight.—2. Lympho-sarcoma invading the Duodenum. The growth originating in the lumbar glands had penetrated the duodenal wall and produced at one place narrowing and elsewhere dilatation of the duodenum. The specimen was from a woman, aged forty-one who died in St. Bartholomew's Hospital, under the care of Dr. Gee. During life an irregular ovoid tumour was felt in the epigastric region. The greater part of the tumour was dull on percussion. A lesser region was resonant. The dull part proved to be where there was the greatest infiltration with narrowing of the intestine; the resonance was not due to intestine in front of the tumour, but to the dilated duodenum. The patient's illness was of about eight months' duration. The first symptom she noticed was a pulsation in the abdomen. After a time attacks of vomiting came on, which usually began a quarter of an hour after taking food. The lumbar and mesenteric glands and the duodenum were the only parts infiltrated.—3. Endocarditis with Miliary Abscesses of the Heart in a case of Hip-joint Disease. The hip-joint showed denudation of the cartilage on the acetabulum and head of the femur, and was full of pus when opened, as was also the right sterno-clavicular joint. The heart showed growths on and destruction of the aortic valves, and an ulcer on the upper part of the ven-

tricular wall. The walls of both ventricles showed numerous minute specks looking like tubercles, and there were similar specks on the pericardium near the apex, and also in the liver and mucous membrane of the small intestine. On the surface of the brain there were similar specks surrounded by injected patches. The spleen and kidneys contained softened infarcts, and so did the right lung. There was a slight degree of pericarditis, a considerable right pleurisy, and some peritonitis. The little specks were found on microscopic examination not to be tubercles. They had no reticulum and no giant cells, and yielded no bacilli. They were merely collections of leucocytes, and were, in fact, very early abscesses. The patient was a boy, aged sixteen. He had a fall on November 11th, 1882, and a few days after acute inflammation of the joint, though not well marked externally, seems to have begun. Endocarditis followed. Two days before his death he became suddenly hemiplegic, and showed some symptoms of tubercular meningitis.—4. Chronic Inflammation of the Glottis, from a woman aged twenty-five, who died with phthisis under the care of Dr. Church in St. Bartholomew's Hospital. During life she had dysphonia, dysphagia, and dyspnœa. She had been recently confined, and the duration of her phthisis was unknown. The dyspnœa suddenly became urgent, and she died before tracheotomy could be performed. The vocal cords, arytenoid cartilages, aryteno-epiglottidean folds, and epiglottis were all greatly thickened, and by their thickening occluded the glottis. At the root of the epiglottis there was a small erosion, and all down the trachea there was a long patch of redness and ulceration. No tubercle was visible in the larynx or in the trachea. There were cavities in both lungs.—Dr. GOODHART said that last year he brought forward evidence of the occurrence of ulcerative endocarditis in groups. He had himself seen two or three cases lately, and he would like to know whether others had met with cases recently.—Dr. CURNOW said that there had been three cases at the Seamen's Hospital in the last three months.—Dr. WILKS asked whether the infarctions were secondary to the endocarditis, which itself was secondary.—Dr. CURNOW said that in the three cases he had mentioned the ulcerative disease was secondary to old valvular disease.—Mr. WALSHAM asked Dr. Norman Moore if any examination was made of the laryngeal muscles in the case, as lately there had been very peculiar changes described in the muscles, tubercles between the muscular fibres and some change in the fibres themselves.—Dr. NORMAN MOORE replied that he had not been able to satisfy himself that ulcerative endocarditis had not been epidemic at St. Bartholomew's. He examined the specks in the endo- and pericardium and liver for bacilli (Ehrlich's method), and satisfied himself that there were none. There was no tubercular disease of the larynx itself; there was only great thickening.

Dr. TURNER showed a Heart with stenosis of the mitral opening, calcareous thickening of the mitral curtains, and a cluster of recent vegetations along their line of contact and upon the adjacent part of the wall of the auricle, and also upon the aortic valves. Both auricles were dilated, and the left much thickened. A sacculated fibrinous coagulum about the size and shape of a hen's egg was found lying loose in the left auricle; its surface was in places smooth, in others roughened, and it appeared to have been formed some time before death. Its contents had escaped through a large rupture at one end. It appeared to have been at one time continuous with a clot still adherent to the left auricular appendix. A very similar specimen had been already shown by Dr. W. Ogle. The heart was obtained from the body of a woman, aged thirty-four, who died soon after her admission to the London Hospital. She had had an attack of acute rheumatism two or three years before. During life a double bruit was heard over the apex and a doubtful diastolic bruit down the left side of the sternum. A smaller loose fibrinous coagulum, the size of an almond, was found in the right auricle. The lodgment of the large loose coagulum, above the mitral orifice, must have embarrassed the action of the overtaxed auricle. The discharge of the contents of such a large clot must also have had a profound effect. The case was also interesting in that recent vegetations were found upon the tricuspid valve concurrently with those on the left side of the heart.—Dr. TURNER also showed a portion of the base of one lung, near the edge of which was attached by a narrow pedicle a branched body half an inch in diameter, like a piece of coral, white with a smooth surface, firm and elastic. It was concentrically laminated, without appearance of organisation, and resembled the melon-seed bodies of synovial membranes and the rounded concretions sometimes found in serous membranes. The specimen was obtained from a man aged seventy who died from cystitis and pyelo-nephritis; he also had bronchitis and emphysema. There were loose fibrous pleuritic adhesions of old date, but not near this body.—Dr. TURNER further showed the Liver of a man aged thirty-four who died from pneumonia; he had had syphilis ten years previously. The liver weighed eleven pounds three ounces, was uniformly enlarged, firm, and smooth; it stained with iodine in a manner typical of lardaceous disease, and there was a lobulated appearance of the liver suggesting cirrhosis in addition. Microscopically examined it was found that this appearance was produced by areas of liver tissue surrounded by a zone of tissue highly infiltrated with lardaceous material, in which only an incomplete network of liver cells was recognisable. The lardaceous degeneration appeared to be seated in the capillary network, and by the swelling up of that network to lead to the compression and atrophy of the liver cells. This was seen both in the tissue intermediate between the apparently healthy liver tissue and the infiltrated areas, and also in certain small lardaceous deposits scattered through the islands of liver tissue. The kidneys were lardaceous. Heart hypertrophied. Grey hepatisation of the upper lobe of one lung with purulent pleurisy, and old fibroid thickenings at the apex of each lung.—Dr. BARLOW asked whether these appearances were not due to changed gummata. He had seen a liver which was stained very deeply with iodine in places, while the liver substance around was healthy, and he considered these were retrograde gummata; the patient was syphilitic.—Dr. NORMAN MOORE had seen two such livers; parts of them were normal, while in parts the amyloid reaction was obtained; there was no history of syphilis in these cases.—Dr. TURNER said that he was not of opinion that these deposits were gummata; for in all of these infiltrated areas there were signs of liver cells, and the change was fairly uniform throughout the whole organ.—Dr. GOODHART thought it a very difficult question to decide. Specimens in Guy's Museum which had been believed to be retrograde gummata had been very carefully examined by Dr. Fagge a year or two ago, who concluded that they were really examples of lardaceous disease.—Dr. CURNOW asked Mr. Barlow if in his case the gummata were as numerous as the infiltrated patches in the liver shown by Dr. Turner.—Dr. BARLOW said the liver was very much enlarged, and he did not suspect the existence of gummata until he applied the iodine test. There was no sharp line of demarcation between gummata, syphilitic infiltration, and cicatricial contraction.

Mr. SHATTOCK showed a specimen of Polypus in the Bladder of a female child, aged one year and a half. The tumour was in structure exactly like a nasal polypus, and it was evidently capable of removal; part of it occupied the urethra; both ureters were dilated; kidneys healthy.

Mr. SUTTON showed the Skeleton of a Baboon (West African), aged a year and a half, with Rickets. The liver was lardaceous; the other viscera healthy. The bones were very vascular, and their curves much exaggerated. The epiphyses all showed the characteristic changes of rickets, the line of ossification being very irregular and enclosing islets of cartilage. The calvaria was thickened, but a condition not unlike cranio-tabes existed below the superior curved line of the occipital bone; the occipito-mastoid suture was still unclosed. The right radius articulated on the inner aspect of the right ulna, and rested on the coronoid process of the ulna, and both of these bones articulated with the trochlea of the humerus. This, he thought, was due to detachment of the lower epiphysis of the humerus at a very early life. Monkeys cut their milk teeth very early, and so these escaped the disease. In this baboon the dental follicles of the permanent teeth were enormously thickened, and he thought this might account for the delayed dentition in rickets. In the rickety epiphyses the lime salts are deposited irregularly, so as to circumscribe small islands of cartilage, and he suggested the name of diffuse epiphysis for this condition.—Mr. EVE thought that in animals we had the purest form of rickets; the bones were very different from those in children; they were very porotic; skulls and long bones as well, particularly in lions, and with this but a slight degree of curvature. There is only a slight irregularity of the epiphysial line, far less than in children. He thought that in man the islets of cartilage occurred in the end of the diaphysis rather than in the epiphysis.—Mr.

CLEMENT LUCAS asked as to the time of development of this baboon, and as to the diet and habits of this animal. He had observed rickets in a greyhound, which strayed from home, and only returned after some weeks with severe and advanced rickets, and recovered under proper diet.—Dr. GOODHART remarked on the lardaceous liver, and asked whether monkeys were above suspicion in the matter of syphilis.—Dr. BARLOW said that the rickety liver in children did not stain with iodine as this was said to do.—Mr. SUTTON said monkeys at the Zoological Society's Gardens lived about ten years. He found cartilage islets in both diaphysis and epiphysis, and particularly when there were two or three centres of ossification, as in the humerus. This baboon was fed on nuts, fruit, soaked bread, and the gifts of the visitors. He hoped soon to show the skeleton of a rickety lizard.—Dr. WILKS said there was a skeleton, said to be that of a syphilitic monkey, at the Anthropological Society.—Mr. SUTTON had never seen any evidence of syphilis in a monkey.

The following card specimens were shown:—Ruptured Stomach from a child aged four years, by Mr. John R. Lunn; Renal Calculus and Abscess (Traumatic?), Rupture into Left Pleural Cavity, by Mr. John R. Lunn; Deposit of Lime Salts in Mucous Membrane of Hepatic Ducts in an Ox, by Dr. B. G. Morison.

CAMBRIDGE MEDICAL SOCIETY.

AT a meeting of this Society, held on December 1st, 1882, Professor Humphry, M.D., F.R.S., President, in the chair,

Mr. WM. ADAMS, F.R.C.S., Surgeon to the Great Northern Hospital, read a paper on "Dupuytren's Contraction of the Fingers," which was illustrated by a number of plaster casts showing the condition of some of the hands on which he had operated, before and after the treatment. In 1832 Dupuytren described, from a dissection, the anatomical conditions existing in this form of finger-contraction which we now distinguish from other forms of contraction by his name. He demonstrated the fact that the fingers were drawn down by contraction of the fascia alone, and that the tendons took no share whatever in producing or maintaining the contraction, which he found to be entirely removed after division of the fascia. Dupuytren especially described the digital prolongations of the fascia as passing laterally to the sides of the phalanges. He divided these digital prolongations, and was surprised to find that he could at once straighten the fingers; "the tendons [he observed] were not implicated in any way, and their sheaths had not been opened." Dupuytren's description has since been confirmed by other observers, more especially by Goyrand of Aix; the late Professor Partridge, who placed a dissected specimen in the Museum of King's College; and, it is believed, the late Mr. Stanley dissected a specimen which exists in the Museum of St. Bartholomew's Hospital. In 1864 a good demonstration of the relation of the fascia to the tendons and their sheaths was accidentally afforded the author. A gentleman who suffered from Dupuytren's contraction of the fourth and fifth fingers met with an accident in attempting to hold a restive horse. The contracted fingers were torn open, and the skin in the palm of the hand torn across; the sheaths of the tendon were not injured. The tendons in their sheaths were seen lying at a depth from the surface, running along the concavity of the curve, in proximity with the bones, whilst the fascia had evidently been stretched across like the string of a bow. Mr. Adams turned this accidental occurrence to practical account by altering the method of operating, which had previously been based upon the idea of a deep tendinous contraction, which could only be divided by a deep puncture, and passing the knife from below upwards, as in ordinary tenotomy. He now passed it between the skin and the fascia, and cut from above downwards; and he had also modified the details of the operation, especially directing attention to the digital prolongations of the fascia, as they pass to the sides of the phalanges; and improved the mechanical appliances to be used in the after-treatment. The anatomical demonstrations above referred to, he thought, made it clear to any surgical mind that the only rational and efficient treatment must be the division of the contracted fascial bands, which would certainly not yield to mechanical extension. Mechanical treatment is only applicable to very slight cases, when contraction is only commencing. But should the operation be performed by open-wound, or by the subcutaneous method? Dupuytren in the year 1831 operated by open-wound, making three incisions. Suppuration followed, but the case progressed favourably, and all contraction being removed, the natural movements of the fingers were restored. In 1831 Stromeyer re-introduced, in an improved form, the operation of subcutaneous tenotomy, which had been first devised and performed by Delpech in 1816, but only in one case which was followed by inflammation, so that he never repeated the operation. Subcutaneous surgery, therefore, dates its origin from 1831, and was introduced into England by Dr. Little in 1837. The more recent changes have been in favour of a return to the method of operation by open-wound, and the operation recommended by Prof Busch, of Bonn, is that which has attracted the most confidence. He (Mr. Adams) apprehended, however, that if the subcutaneous method of operating were carefully performed, its results would be far more perfect than could be obtained by open-wound, and without any of the risks which this method must necessarily entail. The tendency to relapse does not exist in any marked degree, but on the contrary is rare and exceptional. Moreover, it is satisfactory to know that the causes of relapse are within control, and that if relapse should occur, the operation can be repeated with a certainty of success.—Mr. J. H. HOUGH, upon whom Mr. Adams had operated for this contraction, gave an account of his own case. About twelve years previously, when a boy at school, he observed a small swelling in the palm of the left hand. For some time it gave rise to no annoyance, but when an undergraduate he found that he was obliged to give up rowing on account of the severe pain in the palm which that exercise induced. When a student in London he showed his hand to the surgeon for whom he was dressing, who at once said that the affection was fascial and not tendinous, and suggested an operation. The operation was incomplete as he was not under the influence of an anæsthetic, and unable to bear extension. A year later a more complete operation was performed, and for a time he did very well; as soon, however, as he left off extension the hand relapsed. About a year ago the inconvenience he suffered in consequence of the contraction made him determine to undergo further treatment, and he accordingly placed himself under the care of Mr. Adams. The hand was now perfectly free; a very slight degree of contraction existed in the ring finger, from contraction of one of the digital prolongations of the fascia, which had taken place since the operation, but which gave no trouble.—In answer to Mr. Hough, Mr. ADAMS said there could be little doubt of the existence of a gouty tendency in the great majority of cases of this form of contraction.

Mr. LAWRENCE HUMPHRY (of the Victoria Hospital for Diseases of the Chest) showed several Tissues and Fluids taken from Tuberculous Patients, which had been stained by Ehrlich's method, and in which the bacilli were present in considerable numbers. He also demonstrated the manner in which he had prepared them.

Mr. LUCAS exhibited a Liver affected by malignant disease which had originated in the lesser omentum and spread along the bile-duct, causing total obstruction and extreme jaundice. The liver had undergone no enlargement, and the patient had shown no sign of impairment of nutrition.

MIDLAND MEDICAL SOCIETY.

THE ordinary meeting of this Society was held in the Birmingham Medical Institute, December 6th, Dr. Malins, President, in the chair.

The PRESIDENT showed the Ovaries and Fallopian Tubes which he had removed from two patients. One was single, aged thirty-eight, and had suffered ovarian pain for thirteen years. Considerable adhesions were found in the pelvis. The second patient was married, aged thirty-nine. The left ovary was soft and friable, and was removed with difficulty. Both cases did well.

Mr. WILLIAM THOMAS exhibited Three Polypi of the Rectum, each about three-quarters of an inch in diameter, all of which had been removed from a child six years of age. Allusion was made to the rarity of multiple polypi of the rectum, this being the only case he had met with or read of. He also showed the heads of two Femora, removed by resection from two cases of morbus coxæ, which presented similar features. In both the head of the femur rested firmly on the margin of the acetabulum, and at the point of

contact the cartilage was completely gone, so that the cancellous tissue of the head of the femur rubbed against that of the margin of the acetabulum. In each case the head of the femur was grooved by the pressure.

Dr. SANDERS showed a Fracture and Dislocation of the Body of the Seventh Cervical Vertebra, the posterior edge of the lower inter-vertebral cartilage pressing upon the cord, but without injuring it. There was also a fracture of the left laminar process of the vertebra, but no hæmorrhage into the cervical canal. The patient lived eight days after the receipt of the injury, and during life there was complete paraplegia of all nerves below the first dorsal.

Mr. F. L. PHILLIPS exhibited a man, aged twenty-five, who had been treated for epilepsy for fourteen years, and was now covered with a rash of thirteen months' duration. There was no history of syphilis. The eruption consisted of papules and tubercles on the face and back of shoulders, arms, and legs. Some of them were as large as a walnut, and tended to suppurate at the apices, forming rupial-looking patches, but were not itchy. This condition was attributed to the prolonged use of the bromides.

Mr. PHILLIPS also showed the Metatarso-phalangeal Joint of a man who had had many attacks of gout. The cartilages and ligaments of the joint were infiltrated with fawn-coloured urate of soda. The patient, who was a chrome worker, died rapidly from an attack of acute gouty bronchitis.

Dr. C. LEWIS exhibited a specimen consisting of a Suppurative Ovarian Cyst, with a uterine attachment, which had had been removed from the body of a girl, aged eighteen. Three days before death, having previously been in fair health, malaise and slight tenderness over the right ovary were complained of. The following day there was a high temperature, and all the signs of traumatic peritonitis. The cyst was the size of a hen's egg, containing between two and three ounces of pus, and was very adherent to all the pelvic viscera. A small rupture was found in the cyst wall. The left ovary was also found to be enlarged, and the Fallopian tube to contain a small pyo-salpinx.

Dr. T. NELSON showed twenty Calculi, which one patient had passed per urethram at different times. The stones varied in size, one being as large as a horse-bean.

Dr. SAVAGE read a paper on "Some of the Diseases of the Fallopian Tubes." He referred especially to hydro- and pyo-salpinx. These diseases exist, in the author's opinion, much more frequently than is laid down in the text-books; and that there is such a frequency should not seem so surprising, seeing that both uterus and Fallopian tubes are developed from the same fœtal structure, Müller's duct. As causes which could be ascertained, he mentioned gonorrhœa, both recent and latent, the abuse of pessaries, especially intra-uterine ones, and pelvic peritonitis or ovaritis. The first effect of inflammation is to cause obliteration of the uterine and fimbriated ends of the tubes, thus allowing a collection of the abnormal secretion. The relatively large amount of areolar tissue in the wall of the tube, as compared with that in the uterine wall, accounts for pus being so common in the former. Surgery is able to step in and remove where necessary these tumours, the diagnosis of which must often be presumptive, based on the physical signs and the clinical history. The operation is often a difficult and a tedious one on account of the frequent accompaniment of firm adhesions, and the danger of an escape of the fluid contents in the case of pyo-salpinx. If left alone the termination may be:—1st. Resolution and absorption; this would be very improbable where pus is present, and it would not affect the results of former adhesions. 2nd. Bursting into the rectum or vagina, which would have a curative tendency, or into the peritoneum; this would be certainly fatal unless early surgical interference be adopted. The operation for the removal for diseases such as these is an extension in abdominal surgery which commenced in ovariotomy. In the discussion which followed Mr. Ross Jordan, Dr. Molins, Mr. Chavasse, and Mr. Harmar, took part.

Dr. G. P. BEST read a paper "On the Methods of applying the Tests for Albumen." After remarking on the importance of the early diagnosis of granular kidney, and the fact that this could only be settled by the discovery of small quantities of albumen in the urine, he glanced at the more careful methods of examination from time to time suggested; and while arguing that the very suggestion of these more elaborate methods implied certain necessities, he brought forward his idea of utilising the syringe or suction principle for the purpose of meeting them. First was considered the advantage in point of accuracy of the apposition of urine and nitric acid obtained by the use of the syringe; a point most important in those early cases of granular kidney above alluded to in which the quantity of albumen is small. Secondly, the convenience of the application of this method in house-to-house visiting. In illustration he exhibited a pocket apparatus, arranged for him by Messrs. Salt and Son, which exemplified the general principle as well as the particular application. In this portable case Dr. Best substituted for nitric acid the hydrochloric solution of common salt of Dr. Roberts, which acts equally well, and is better suited for packing.

YORK MEDICAL SOCIETY.

THE ordinary meeting of this Society was held on December 9th, 1882, Mr. W. H. Jalland in the chair.

Mr. JALLAND made some remarks on two cases of Excision of the Knee treated by him at the York County Hospital. Both patients were shown. The results were satisfactory. In one case the patient was up within a month of the operation.

Mr. JEFFERSON read notes of a case of Pernicious Anæmia. The patient was fifty-two years of age. He stated that for six months before admission to the York County Hospital he had suffered from severe epigastric pain which kept him awake at night, and that for two months he had vomited after meals. When admitted he was feeble and emaciated; his expression was indicative of suffering, and he complained of severe pain at the outer border of the left rectus on a level with the umbilicus. There was no tumour or enlargement of any of the organs. His urine was normal. The case was thought to be one of malignant disease. A pill containing morphia, creasote, and nux vomica was ordered, and after ten days the vomiting ceased Citrate of iron and quinine were then given with cod-liver oil. In fourteen days he gained sixteen pounds in weight, and within a short time an additional stone. He returned to work and has had no relapse.

Mr. CLIFFORD GILL showed some sections of Cancer of Bone. The patient from whom the diseased bone was taken was an elderly woman, who for many years had been insane. A tumour was noticed in the neighbourhood of the sacro-iliac synchondrosis, and this when removed had attained the size of a Maltese orange. Shortly after the appearance of this tumour, a small scirrhous tumour of the breast was detected. On examination under the microscope the bony tumour was found to present the characteristic cancerous arrangement.

Mr. SPENCER read some remarks on Acute Rheumatism. As illustrating the connexion between acute rheumatism and erythema multiforme, he took three cases. Those of two young women between sixteen and twenty, and that of a man aged forty. The women were fair-complexioned and anæmic, the man dark and anæmic. In each case there was a period of invasion, and, in two, sore-throat during this period. In all these the attack followed on a chill, the erythematous rash commenced by distinct papules on the hands and feet, and the urine was turbid and deposited urates copiously. In one there was no affection of the joints. In the other two many joints were affected. After some allusion to the remarks of Trousseau, Bristowe, Powell, and Thin on the subject, Mr. Spencer referred to a case brought before the Society last session by Mr. Jefferson, where the order of symptoms was: firstly, pericarditis; secondly, erythema papulatum; and, thirdly acute rheumatism.

Mr. SPENCER then read the following notes:—A young delicate girl, sixteen years of age, who had suffered from chlorosis for some time, was exposed to wet and cold. Four days afterwards she began to suffer from synovitis of the ankle-joint. The general symptoms were slight, and there was no febrile disturbance. On the following morning, when rising from the sofa, she fell backwards in a fainting condition, and soon afterwards died. On post-mortem examination the walls of the heart were found to be thin, the valves normal, and the foramen ovale patulous. A laminated fibrinous mass, which was partially adherent, occupied the apex of the left ventricle, and a quantity of translucent fibrin, possibly of post-mortem origin, extended from the superior vena cava into the right auricle through the patent foramen ovale into the left auricle, and through the mitral orifice into the left ventricle which it nearly filled.

Mr. Spencer discussed briefly the question of the essential nature of acute rheumatism, referred to the zymotic and chemical theories of its etiology, and, finally, pointed out its relationship to gout, in which disease a poison or poisons manufactured by perversion of a normal process is known to be the predisposing cause.

Reviews and Notices of Books.

A Dictionary of Medicine. By various Writers. Edited by RICHARD QUAIN, M.D., F.R.S. London: Longmans, Green, and Co. 1882.

[SECOND NOTICE.]

IT is barely possible within ordinary limits to adequately notice a work like the one before us. Of its general scope, and of those who have mainly contributed to it, we have before spoken; and if in what we have still to say there may appear to be neglect of some writers, it must be understood that we by no means desire to disparage the quality of their work. Indeed it would be difficult to do so, since, for the most part, the various subjects have been apportioned to those who by previous labours have shown themselves fully competent to deal with the subjects upon which they have written in this work. We trust, however, that in taking another glance through the contents of this volume we may fulfil the purpose we have in view—namely, to indicate its nature and utility. And, in the first place, one naturally turns to subjects which at the present day are particularly engaging attention. We find that the subject of Contagion has been assigned to Mr. Simon, and although, as stated in a foot-note, the article was written four years ago, it is an admirable summary of knowledge upon the subject. In so far as it falls behind the later discoveries of science, it is supplemented by the articles on Zyme and Bacilli by Mr. Horsley, as well as by Professor Greenfield's contributions. But, as Mr. Horsley points out, Mr. Simon has anticipated the directions in which researches made subsequently to the period of his writing would tend; and certainly there is no one who could have dealt with this intricate subject in a more masterly way. He divides contagia into the parasitic and the metabolic, the latter being the true contagia in the generally restricted sense, the mode of action of which is well exemplified within the body by the propagation and dissemination of cancer. It is singular to find the article on Bacteria written by one who doubts their essential action in fermentations, and who also is no believer in the germ theory of disease, which is daily gaining so much evidence in its support, and many readers may be disappointed in reading Dr. Bastian's brief but clear article, in not finding there such an exposition of the *rôle* of micro-organisms in disease as might naturally have been looked for. If, however, they will turn to Professor Greenfield's two articles on Micrococci and on Malignant Pustule, and also to Mr. Horsley's paragraphs in the Appendix on Bacilli, they will find a sufficient corrective to Dr. Bastian's negative attitude. In the first of these articles the pathological relations of micrococci are dealt with, particularly as regards blood poisoning and specific contagious diseases; and its closing sentences may be cited as a statement of the caution with which conclusions should be drawn from the presence of these organisms. The writer says: "All that can safely be affirmed is that micrococci are to be found in great abundance in the pathological excretions and secretions of certain contagious diseases—especially when, as in diphtheria, these have a tendency to become putrid; and that they are usually also present in the active virus of inoculable diseases—for example, vaccinia; but whether they constitute the actual contagium, or by their action produce a local condition which is favourable to the absorption and activity of the virus, is at present uncertain." The article on Malignant Pustule contains several drawings of the bacillus anthracis, and has been placed in the hands of one whose observations have done so much to advance our knowledge of this disease.

In the article on the Abstraction of Blood, Dr. Wiltshire deals with a subject which fifty years ago would have been deemed worthy of more extended notice than is here accorded to it; but we are perfectly in accord with him in his remarks as to the utility of general bleeding in certain conditions, and venture to predict that the practice will be reintroduced on a far less extensive scale indeed, but on a more rational basis, than formerly. To one of the sub-editors, Dr. Bruce, is assigned the article on Morbid Conditions of the Blood, which, like that on Anæmia by the same writer, treats fully of a complex subject in which pathology has still much to discover.

Several articles are devoted to diseases of the nervous system, those of the Brain being mainly contributed by Dr. Gowers, and those on the Spinal Cord by Dr. Bastian. Other able writers have also been pressed into this service, so that the Dictionary is particularly rich in contributions from observers well qualified to treat of this, one of the most exhaustively studied and most interesting subjects in medicine. Mr. Hutchinson contributes articles on Compression and Concussion of the Brain, admitting the occasional fatality of the latter, apart from any manifest lesions. Dr. Broadbent, writing on Chorea, prefers to speak of it as a symptom rather than as an integral disease. Thus he argues against its spinal origin, and whilst admitting the fact of capillary embolism in the corpora striata at sometimes the exciting cause of an attack, he does not regard it as the sole factor. He prefers to consider chorea as a "delirium of the sensori-motor ganglia," rather than an "insanity of the muscles." Dr. Brown-Séquard has summarised his experience of Epilepsy in an article, in which, naturally, he gives considerable prominence to experimental research; and Dr. Buzzard supplies two interesting articles upon Hysteria and Hystero-Epilepsy.

The subject of Bright's Disease is treated by Dr. Grainger Stewart, who adheres to the division of this affection into the three types—inflammatory, waxy, and cirrhotic—which he adopted in his original thesis on the subject. The article has the merit of being planned in a methodical and systematic manner. We note that the writer attributes the "cirrhotic" form mainly to the abuse of alcohol. Dr. Quain, who contributes several of the articles on Heart Disease, writes also upon diseases of the Bronchial Glands, and remarks incidentally that the theory advanced by De Mussy upon whooping-cough coincides with observations made by the late Dr. Hugh Ley, although subsequent observation by others does not bear out this supposed relation between glandular swelling and that disease. The writer of the article on Renal Calculi is inclined to believe that too little attention has been paid to the part played by the renal cells in calculous formation, and suggests that under certain conditions the urinary salts may be retained and deposited in these cells, thus forming a starting point for calculi. This is one of the few unsigned articles in the volume. Mr. Godlee writes lucidly upon Cancer and on Tumours, his summary being illustrated by a series of excellent histological drawings. He alludes to the fact that our knowledge of new growths is undergoing a process of rapid evolution, and in the main confines himself to descriptions of their structure; and is careful to point out the difficulty there is at present in accurately defining the group of cancers. Sir W. Jenner's contribution is sure to attract the attention it deserves; it is a careful and perspicuous clinical analysis of Deformities of the Chest. Dr. Quain speaking of the Treatment of Disease, points to the growing advance of rational methods based on knowledge of the nature of disease and on the scientific study of the

action of remedies; and enumerates as modes of treatment, the expectant, the homœopathic—"which may be described in the words of Molière, who wrote long before Hahnemann, the inventor of homœopathy as, 'l'art d'amuser le malade pendant que la nature guérit'"—the palliative, stimulant, antiphlogistic, purgative and diaphoretic, the water cure, revulsive, dietetic, and climatic. The time has passed, however, for any such systems of treatment to be formulated; and one cannot but think that this classification, however valuable as a summary, is misleading. Mr. Netten Radcliffe writes upon Epidemics, and after showing how various have been the meanings attached to the term, suggests its abandonment in a technical or quasi-technical sense, retaining it simply as synonymous with "prevalent" or "general," especially, as he says, since the advance of knowledge has dispelled ideas on external epidemic influences. Further on in the volume we find equally well-reasoned and instructive articles from the same pen on Periodicity in Disease, an interesting subject for study to which Dr. Laycock devoted much attention, and on the Plague, a subject which we are too apt to consider as purely of antiquarian interest.

The article on Fever is by Dr. Broadbent, who defines the condition as consisting in a rise in the temperature of the body to a certain height and lasting a certain time, accompanied by functional derangement attributable to the febrile condition itself. He also contributes a lengthy article upon Typhoid Fever. Considerable space is devoted to the subject of Hospitals. In the first place Mr. Holmes writes on Hospitalism, the main tenor of his article being that such a condition should not exist if proper hygienic precautions be taken; therein combating Sir James Simpson's well-known conclusions. The subjects of Hospital Administration and Hospital Construction are dealt with by Mr. Douglas Galton in a practical and sensible manner. Nor should we omit to direct attention to the very complete and sensible articles upon Nursing and the Training of Nurses contributed by the lady whose name will ever be held in honour as the pioneer in the improved system of nursing now so long established among us, we mean Miss Nightingale. Writings like these are almost lost amidst the pathological and therapeutical matter that fills the bulk of the volume, and we may take the opportunity of concurring in a suggestion made elsewhere that these and the hygienic subjects—e.g., Dr. Southey's article on Personal Health—might well be extracted and published separately as comprising topics of universal interest and instruction.

To Drs. Payne and Cayley fall many articles on subjects of general pathology, one of the most important of which is that on Inflammation by the first-named writer. It is a concise and readable account of the subject which embodies to a considerable degree the recently adopted views on the process. It may also be mentioned that in the appendix space is devoted to a short article by Dr. Roy upon the Nucleus of Cells—one of the latest points in histology that has been studied most thoroughly—particularly in relation to cell-proliferation, a process of such important pathological bearings. Sir James Paget has contributed a few remarks under the heading of Pathology. One of the most interesting and lucid articles in the volume is that on Tubercle, written by Dr. Gee; it embodies a concise history of changing pathological opinion upon the subject, and thoroughly illustrates the now more or less generally accepted doctrine of "local" tuberculosis. Dr. Eustace Smith writes upon Rickets, and, indeed, contributes most of the articles dealing with diseases of children.

The important subject of Intestinal Obstruction, one of those matters which concern the physician as well as the surgeon, is discussed in a complete manner by Mr. Durham, and, as may be expected, he is earnest in his endeavours to differentiate the various forms with a view to their prompt relief by surgical interference. Mr. Durham presents us here with an analysis of nearly 1900 cases, surely a sufficient basis for drawing tolerably accurate statistical conclusions. Dr. Green, writing upon Pneumonia, refers to the cold bath treatment advocated by Jurgensen, but does not appear to recommend its adoption save in cases of exceptionally high pyrexia. It may be interesting to quote the passage in which he speaks of the pathology of acute pneumonia. He writes:—"Upon the exact nature of the disease, however, we are at present unable to speak definitely. It is maintained by some observers that, like the specific fevers, it is due to a specific cause. Pneumonia, whilst differing from the fevers in not being contagious, resembles them in the typical character of its clinical phenomena, and, to a less extent, of its local lesion. The changes in the lung occurring in pneumonia cannot be induced by artificial injury of this organ, and it must therefore be admitted that there is something special in the inflammatory process. Pneumonia appears to be most closely allied to tonsillitis and acute rheumatism, and, like these diseases, the circumstances under which it originates are certainly exceedingly diverse." With these remarks we are disposed to agree. Mr. Brudenell Carter writes upon the Ophthalmoscope, a subject which is further developed by Dr. Gowers in the article on the Ophthalmoscope in Medicine. Physical Examination is in the able hands of Dr. Douglas Powell, and Dr. C. T. Williams contributes the article on Phthisis, the subject of Diseases of the Pleura being contributed by Dr. Clifford Allbutt, whilst Mr. Beck deals with Paracentesis. The last-named also contributes, among other articles, that on Surgical Kidney, in which he describes in detail the four different morbid conditions included under that rather unscientific term, viz., chronic interstitial inflammation leading to absorption of the medullary portion, and subsequent cortical thinning without pyelitis; acute diffuse interstitial nephritis without suppuration; acute interstitial nephritis with scattered points of suppuration; and the cicatricial kidney. The article on the Urine is written by Dr. Lauder Brunton.

In this rapid glance through the pages of this work we have had but little occasion to be critical; and also, we fear, that we may have been too partial in our selection of the articles included in the book. It is obvious, however, that a work like this, which includes the whole range of medicine and surgery in its scope, cannot be adequately dealt with by the reviewer unless he have unlimited space at his disposal, and unlimited time also. He must exercise a certain selection and judge of the whole from a part, and truly we may admit that, from such a perusal of its articles as has yet been possible, this Dictionary is a work which does credit to British medicine. It would be ungracious not to admit that this success has been attained by the careful selection of writers on subjects upon which they were specially qualified to speak, and we gladly accord to the editor the praise due to this and the other labours that have so long occupied the attention of himself and his colleagues. The work of revision alone must have been a laborious task, and it is hardly to be expected that no errors should creep in;[1] but we do not think there are many. Again, there may be a certain amount of inequality in the manner in which various subjects are discussed; but this can hardly be avoided when so many authors, perhaps the largest number ever gathered together over one book, are concerned. Therefore we believe that as a whole the work will admirably fulfil its purpose of being a standard book of reference until, like other dictionaries of progressive science, it will require to be remodelled or supplemented to keep pace with advancing knowledge.

[1] One misprint has been pointed out to us which is unfortunately a serious one. It occurs in the article on phthisis, where the dose of picrotoxine, a remedy recently introduced for the relief of night-sweating, is given at one-sixth instead of *one-sixtieth* of a grain.

THE LANCET.

LONDON: SATURDAY, JANUARY 6, 1883.

IN entering on a new year it is proper to encourage the feeling of hopefulness and expectation. The man who expects most is, after all, he who generally receives most. The history of medicine in recent years justifies the cultivation of a more sanguine mood than is generally attributed to medical men. Doctors are by no means a melancholy set of men. The reason is that they see infinitely more of recovery and convalescence in their experience of disease than of the opposite, and that while receiving plenty of abuse, they receive more praise and gratitude. There have been few more popular physicians than MEAD, and few who saw more of disease; yet Dr. JOHNSON said of MEAD, "He lived more in the broad sunshine of life than almost any man." This is the true mood for a physician, and if a physician in MEAD'S time could manage to live in the sunshine, *a fortiori* it should be practicable now. With all the admitted limitations of medical art, it is an infinite relief to the suffering portion of the community to receive the visit of a medical man who devotes his life to the removal and mitigation of disease, and who does not readily admit any case to be beyond the reach of some benefit. As in a storm many a captain carries his ship safely through who perseveres in a cheerful and hopeful contest with the waves, so, in extreme circumstances of disease, the physician who is hopeful and has resources, and who has therefore a power of exciting hope in his patient, will often bring the patient through, or extend his life, where a less hopeful or resourceful practitioner would fail. MEAD'S name reminds us of the strides of medicine. He was honourably associated with the introduction of inoculation for small-pox. Since then this great plague has been brought well within the control of enlightened States by an operation which suggests the hope of similar triumphs over other diseases. Objectors will retort that States are still afflicted with huge epidemics even of small-pox, and that other fatal diseases still defy medical art—cancer, hydrophobia, consumption, and the various forms of degeneration which neither BRIGHT nor ADDISON has shown us how to arrest. There is too much truth in this retort to be pleasant. But it is not so true as to damp the ardour of the physician. The great cause of the prevalence of small-pox, for example, is not the imperfection of medical art, but the imperfect intelligence of the people, disabling them for a perfect appreciation of vaccination and revaccination. In the great field of septic diseases, medicine, or rather surgery, has lately made enormous advances. As in the case of small-pox, so, in a less striking way, medicine has pointed out how many other epidemic diseases may be curtailed, but mistaken notions of liberty, or imperfect states of popular intelligence, which it is the beneficent purpose of medicine to remove by the diffusion of medical knowledge, still stand in the way. As regards the case of consumption, of late years its curability, or the chance of beneficially influencing a natural tendency to self-limitation, as Dr. FLINT happily calls it, has been fully admitted, and the recent discovery of KOCH—by the way, originally a country practitioner—justifies a hope that further means may yet be found of preventing the extension of this disease in individual cases, or from one person to another. The various forms of degeneration—Bright's disease, Addison's disease, atheroma, and myxœdema, &c.—are no doubt still great *opprobria* of the medical art, instances of disease in which pathology has far outstripped therapeutics. But does anyone doubt that a man affected with any one of these diseases will be greatly the better for following the advice of a sage and kindly physician? This is one of the most useful departments of medical service and labour. The extension of time taken to effect a given amount of degeneration, and the circumstances influencing the progress, or, if we may so say, the *pace* of degenerations, is one of the most interesting fields for further work and investigation. Meantime it is certain that medicine can do much to retard the progress and to abate the *pace* of such diseases. So that when a great life is visibly affected with such changes, there is still good hope that by medical wisdom it may be lengthened out for years to add to the lustre of the State, and possibly to the peace and happiness of the world. We encourage our readers, therefore, to take an ever increasingly hopeful and cheerful view of the progress of medicine and of their power to affect beneficially the progress of disease. There were never so many workers in earnest to discover the secrets of disease as now, and they were never backed by a more intelligent and well-educated body of practitioners.

We have a good hope that the year will witness some legislative attempt to increase the efficiency of medical education and to abate the worry of multiplied medical examinations; to raise the minimum standard of medical education, and, in raising that, to raise the higher standards of it. The Corporations of the profession which represent its real life and glory will survive; others may disappear. Be this as it may, we enter on the duties of another year with the conviction that British medicine and surgery will hold their place in the great competition of the world, and that this country will never want men to stand worthily in the succession of HARVEY and SYDENHAM and JENNER and HUNTER.

AT a time when pathology is doing so much to remove the study of medicine from the empirical to the exact, and when observation of the therapeutic effect of various drugs bids fair to largely increase our knowledge of specific remedies, there seems at first sight little reason why the medical mind should even for a moment be drawn aside from the objective to the subjective view of disease, as the tendency of advancing research is constantly to diminish the number of maladies in which an important part is played by conditions out of reach alike of the scalpel and the microscope. The time is not so long gone by when, even within the profession itself, many familiar diseases were supposed to depend upon spiritual, perhaps extra-terrestrial, causes, the operation of which was scarcely a legitimate object of inquiry. Up till the present moment, indeed,

large numbers of the people look upon disease generally as a direct infliction of Providence, while many more believe special outbreaks to be the consequence of a more than usually perverse departure from the paths of rectitude. A certain phase of this belief is favoured by the profession, but our constant effort is to ascertain the nature of those laws whose silent but certain rule we can break only at our peril. There are departures from health in abundance which, whether serious or slight, we cannot satisfactorily explain or demonstrate, and a very little of superstitious awe is required to see in these the direct interposition of an offended Spirit.

We do not need to express the very slight hold which all such feelings have upon the medical profession, but it may be useful to bear in mind the large share which superstition and sentiment take in shaping the lives of many of our patients. There are conditions coming frequently within our ken as physicians which we might with much probability of truth view simply as diseases of sentiment or will, and these in people whose business and general mental capacity cannot be suspected. Trivial twists of mind may or may not depend in all cases upon a physical change in the brain, but there can be no doubt that we have many apparently functional disorders of mind as well as of body to deal with. Even though the really important disease from which our patient suffers be gross and easily named, there may as a result ensue a condition of mind which the thoughtful physician will recognise and appreciate, whether as a help or hindrance in his work. The dictum that a favourite drug is useful for a particular disease may not unfrequently be found fallacious if the mental condition of the patient is overlooked, and one chief difference between the thoughtful, intelligent, and successful physician, and another who is neither consists in the attention which the first, perhaps unconsciously, devotes to this factor in his case. We are too much in the habit of treating our patients simply as machines which have got out of order, and inasmuch as their feelings are always deeply concerned in bodily ailments, we would do well, so far as we can, favourably to affect them in that quarter. Sympathy is a powerful drug in the hands of a skilful administrator, and we should no more neglect its use than we would other weapons of our armamentarium. Everyone practically acquainted with what is called the natural history of disease knows well that a particular malady affecting a patient of sanguine temperament may be looked upon with more composure than, all other things being equal, would be the case were the sufferer of phlegmatic constitution. In the one case we can rely on a resiliency which will fail us at the critical moment in the other; and many recoveries take place which upset our prognosis, because apparently the object of our care "will not kill." Men who cultivate a hopeful demeanour in the sick room will more readily elicit this helpful buoyant spirit than others who are constitutionally grave and desponding, and men of the latter character may unwittingly hinder the recovery they are so anxious to promote. Physicians prone to gravity in all things are heavily handicapped in their work, but a steady recognition of the fact may lessen its ill effects, while, by a sort of compensatory law, they have often the happiness to inspire a confidence which may be equally useful to the patient.

Though the therapeutic effects of hope and confidence are not detailed in our text-books, they are enough often to turn the scale in favour of recovery; and yet they are but two of the many mental medicines which a judicious physician or surgeon may exercise in the management of disease. There is much solidity in the faith placed by families in their ordinary attendant on the ground that he knows the constitution of each of its members, and when this is not the case his intimate acquaintance has not been turned to good account. In no respect has the family physician such an advantage over the consultant as in this, and obviously it is an advantage which upon fit occasions can be shared and utilised. A full recognition of the value rightly attaching to the mental treatment of physical ailments will improve the usefulness of the physician, give him a higher place in the affection of his patients, and materially assist in promoting their return to health when suffering from very various diseases, functional or organic.

IN an instructive as well as amusing composite article in the *North American Review* on the Health of American Women, Drs. LEWIS and CHADWICK and Mrs. STANTON supply some information that may be useful to the gentler sex in England. Dr. LEWIS states that he has for years past made inquiries of travellers as to the health of the women of many races and countries, and has invariably been told that they enjoy as good, and sometimes even better, health, by reason of their better morals, than the males. In Dahomey, according to CRAFTS, the fugitive slave, the women are and feel themselves to be considerably superior to the men. "Men," said one virago to him, when asked what she thought of them as warriors, "men can't fight; we three thousand women of the King's body-guard would like to meet six thousand men; we'd show them how to fight." And when Mr. CRAFTS deprecated the hostile spirit in which she spoke, continued: "How can a decent woman speak of the contemptible wretches in any other way?" Dr. LEWIS bears witness to the excellent results that follow a life in the open air, even in delicate young women, who declare that the removal of their corset will make them "fall to pieces." One such subject, who camped in the mountains of California, on leaving said, "When I came I was in wretched health, now I am as free from pains and weaknesses as these squaws." Dr. LEWIS states that the Boston Normal School for Physical Education trained and graduated 421 teachers of the New School of Gymnastics, and the graduates were about equally divided between the sexes. Many of the women were in broken health, but with removal of the corset and long heavy skirts, and the use of vigorous exercise, great improvement occurred, and it was noticeable that in every one of the ten classes of graduates, the best gymnast was a woman. A convincing experiment was made upon a large number of girls at Lexington. Large buildings were prepared, and for four years three hundred young women, averaging seventeen years of age, and drawn from wealthy families, were subjected to a new and peculiar regimen, to determine the possibility of improving their bodies during their school life, as the bodies of young men are improved in some of the German universities. The curriculum of study pursued was

more severe than in any other school in New England. On entering the school, pupils were measured about the chest, under the arms, round the waist, and the forearm. The average gain for eight months about the chest was two inches and a half, round the waist five inches, the arm one inch and a half, and round the forearm one inch. The work was so hard that, with all this remarkable development, the weight of the pupil was often lessened. Of course, Dr. LEWIS says, the girls came with injunctions from mothers not to climb stairs, and with letters from family physicians urging moderation in gymnastics, and prescribing the horizontal position a number of days each month, but little or no attention was paid to periodicity, and the girls worked through the entire month in those extreme stridings and other vigorous exercises of the legs and hips intended to counteract the evil effects of corsets and long imprisoning skirts, and he declares from personal observation, that in no instance did a pupil fail to improve in health. The results were, that whereas girls came with a dread of stairs, backache, palpitation, and other sufferings, in a few months they could do the full gymnastic work of the school, dance three evenings a week, walk five to ten miles on a Saturday afternoon, and exclaim that they were only beginning to feel what it was to live. The observations of Mrs. STANTON and Dr. CHADWICK are very much to the same effect. Now there can scarcely be a doubt that more vigorous physical exercise is greatly needed for the younger women of the middle classes who are educated in towns in England. Even in our high schools the gymnastic exercises practised are very tame affairs, and by no means comparable, as a means of invigorating the body, to the out-door games of boys. Lawn-tennis, indeed, is excellent as a game, but it requires space, and is essentially a game for summer. Why should not girls play at fives? No game can be better calculated to develop the muscles of respiration and those of the arms and legs, and it can be played under cover and in a very limited space. If our girls are to be more highly educated, their physical powers must be proportionately developed, or they will make but poor substitutes as mothers for the strong, healthy, and rosy, but moderately educated, young women of past generations.

JUDGING by the number and character of the protests received from independent and unprejudiced persons against the Association of Fellows of the Royal College of Surgeons of England, it would seem either that this scheme has been ill-formed, or that its promoters have failed to commend themselves to the majority of their colleagues. It may be remembered that at the annual meeting of the British Medical Association, held at Worcester last August, a small number of Fellows of the Royal College of Surgeons, chiefly provincial, assembled, and formed themselves into a Society, to be called "The Association of the Fellows of the Royal College of Surgeons." The following resolutions were passed, among others:—

"That the duties of the Association be the consideration of all questions affecting the interests of the Fellows and the government of the College.

"That the annual meeting of this Association be held at and during the annual meeting of the British Medical Association."

The scheme was from the first viewed with suspicion by many of the more eminent Fellows. The agitation was believed, rightly or wrongly, to be inimical to the best interests of the College as an educational and scientific body. The fate of the scheme was, however, sealed by the second of the above resolutions. It was obvious that the Association of Fellows was to become the appanage of the British Medical Association instead of an independent and active organisation for the improvement of the scientific and educational status of the College. An almost unanimous opinion prevailed among the Fellows, that, granting a *raison d'être* of such an Association, the fittest time for its annual meetings would be at the election of the members of Council of the College in July. Perhaps the fact that the scheme was promoted at Birmingham, the domicile of the caucus, had unduly prejudiced the minds of the majority of the Fellows, but it is certain that many weeks after the formation of the Association, few, if any, applications for membership had been received from the Fellows. Indeed, it has been openly stated that the alleged solicitude concerning matters "affecting the interests of the Fellows and the government of the College" is for the most part the outcome of dissatisfaction of some provincial Fellows who regard their own interests and those of the College as antagonistic and irreconcilable. If this be true, we have an easy explanation of the languishing condition of the Association, and of the necessity for the recent appeals of its sole remaining secretary. Unless current rumour has played the Association false, its failure is not surprising. Under happier auspices it might have been made an instrument for good. The Council of the Royal College of Surgeons, having for the past few years pursued a more liberal and enlightened policy, has unquestionably magnified the importance of the College as an educational and examining body. It is, however, equally unquestionable that most of its reforms have worked from without inwards, and that many of the measures of which the Council feel most proud were strongly resisted by a majority of its members not many years ago. There is still scope for reform in the affairs of the College, and any plan that will give the body of the Fellows a more direct interest in, and a more effectual control over, its administration is worthy of serious consideration. The long standing grievance of personal voting needs remedying. It is idle to reply that existing charters do not allow of voting by proxy or by papers. If a majority of the Fellows believe voting by proxy to be desirable, it is only reasonable that they should have facilities for enforcing their will and wishes upon the Council.

THE fact that the presence of trees favours humidity is well known, and that the Emerald Isle is already damp enough for all agricultural needs is also allowed. Nevertheless we cannot look with disfavour on the suggestion of Dr. Lyons, M.P. for Dublin city, to replant with trees those mountain slopes in Ireland which at present yield no return to their owners, or, in other words, to endeavour to bring Ireland back, in the matter of forests, to the condition she enjoyed in the days of Strongbow.

WE regret to have to announce the death of Dr. Wybrants, Coroner for the South-Eastern Division of Somerset, and honorary consulting physician to the Shepton Mallet Hospital.

Annotations.

"Ne quid nimis."

1883.

THE first days of the year opened with bright genial weather, and the prospects so far as the public health is concerned are encouraging. The general mortality is below the average, and no epidemic disease appears to be particularly rife. In the political and social world affairs seem to be quiet and settled; even the chronic distemper of Ireland shows some promise of amendment. Still, he would be a rash person who from the present brightness would augur an altogether prosperous year. Already prophets of ill remind us of the old saw, that "when Easter Day falls in Lady Day's lap, then there happens to England some great mishap." Easter this year falls on Lady Day, and believers in old saws will anxiously await the termination of the present year to see what manner of ill this untoward conjunction of circumstances will bring this country. Our powers of reference to "movable feasts" only enables us to say that Easter and Lady Day have not fallen together for the last fifty-three years, so that we are unable to forecast the form the particular disaster is likely to take. To those who can spare the time, and who may have especial interest in the subject, a study of the "golden numbers" will identify the various occasions on which the double event has occurred before, and thus foreshadow the particular disaster in store for us. For ourselves, we are content to use the old saw as a text with a view to persuading authorities to persevere in a course of sanitary reform, and not to allow any sudden epidemic that may arise to find a weak spot in our armour. It is true that at no time since sanitary science has had a history have matters stood so satisfactorily with us as they do at present. Still, a few weeks of bad weather, or a slight relaxation of sanitary supervision on the part of the authorities, might change the present favourable aspect of affairs. In matters of hygiene the expected should never be allowed to come to pass. We should always be prepared to prevent the mischiefs likely to accrue from change of weather or the advent of an epidemic. As regards the political world, we fear that no precautions can prevent complications arising that may lead to disaster, since there it has been said the unexpected always happens; still, much may be averted by a strong and united Government.

THE HEALTH OF THE METROPOLIS IN 1882.

THE health of registration London, with its nearly four millions of population, was, judged by its mortality statistics, in the main satisfactory during 1882. The London death-rate has been all but stationary during the past three years, having been 21·6 in 1880, 21·2 in 1881, and 21·4 in 1882. The mean death-rate during these three years was lower than that recorded in any three other consecutive years since civil registration was established in 1837. The mortality from the principal zymotic diseases, although below the average, did not, however, show a decline corresponding with that of the deaths from all causes. No fewer than 13,553 deaths in London were referred to these zymotic diseases in the fifty-two weeks of last year, including 4647 to whooping-cough, 2329 to measles, 2162 to diarrhœa, 2004 to scarlet fever, 1117 to "fever" (principally enteric), 863 to diphtheria, and 431 to small-pox. London suffered from an exceptionally severe epidemic of whooping-cough during the first quarter of the year, and the death-rate from this disease for the entire year was in consequence considerably above the average. The fatality of measles was also somewhat above the average. The death-rates from scarlet fever and from enteric fever were, however, below the mean rates in recent years; it is noteworthy, however, that the rate of mortality from "fever" (including both typhus and enteric), which showed so remarkable and steady a decline in the twenty years 1861–80, was higher in 1881 and 1882 than it had been in 1879 and 1880. Diarrhœa fatality was considerably lower last year than in either of the two preceding years. The death-rate from diphtheria showed a marked increase last year; 863 deaths being referred to this disease, against 544 and 654 in 1880 and 1881, and exceeding the number in any previous year on record. The fatal cases of small-pox, which had been 471 and 2371 in 1880 and 1881, declined last year to 431, and were fewer than in any year since 1875. Infant mortality was higher in 1882 than in the previous year, notwithstanding the lower death-rate from diarrhœa. On the whole the health of London in 1882, judged by its mortality statistics, was fairly satisfactory, although the facts relating to the zymotic and infant mortality show that there is still much to be effected by further improvement in the sanitary condition of this huge urban population.

PATHOLOGICAL SOCIETY OF LONDON.

AT the annual meeting of the Pathological Society, held on Tuesday last, the Secretary read the report of the Council for the past year. This was in all points, save one, highly satisfactory; for it recorded a distinct increase in the membership, a flourishing state of the finances, and continued, if not increased, activity on the part of the members of the Society. The Comparative Pathology Committee has already been able to exhibit many important specimens, and has amply justified its appointment. The Committee appointed to obtain information respecting the uncompleted cases in the Transactions, has also sent in its report, which has been published in the last volume of the Transactions. The Council has resolved to set aside one or more evenings in April of this year for the exhibition and discussion of the morbid anatomy of organs in diabetes. The single unsatisfactory feature of the report was the list of those removed from the roll of the Society during the past year by death. It included the names of Dr. G. Budd, Dr. T. B. Peacock, Mr. R. W. Lyell, Mr. Critchett, Dr. E. Crisp, and Sir Thos. Watson, nearly all of whom have been both officially and personally most intimately connected with the working and prosperity of the Society through a long period of years. The adoption of the report was moved by Dr. R. Barnes, and seconded by Dr. S. Coupland, and carried. Dr. Dyce Duckworth then moved a resolution thanking the retiring President, Dr. S. Wilks, for his very able and valued services during his two years of office. He referred to the advantage that the Society had derived from having so able and practical a pathologist to preside over it, and one who having been himself a devoted labourer in the field of pathology sympathised with all other workers, and with none more than the young, who all felt assured they might come to him with their difficulties and their results. Dr. Thomas Barlow seconded the resolution, and expressed the hope that in parting with Dr. Wilks as their President they would yet have the advantage of his wide and ripe experience. This resolution was carried with applause, and Dr. Wilks, after thanking the members for their kindness, stated that he had always derived much advantage from their meetings. The work of their Society was eminently real, it was the foundation of their knowledge, and it was progressive, and was of necessity instructive. He had felt it a kindness to be compelled to attend the meetings regularly during the last two years. The progress of that Society was of necessity slow, and the results, as judged from year to year, were not and could not be brilliant. But if a review of their work over a series of years were taken, it would be seen that *there*—in that room—had been worked out the nature and history of disease. As an instance of

this, he referred to visceral syphilis, and to the timid way in which the first specimens were shown some years ago. The growth of their knowledge, on this subject had, however, gradually gone on, until at length it was fairly, if not fully, understood. They did not want brilliant papers at that Society, but steady, patient observation and accumulation of facts. One of the greatest advances made was in histology, which had added enormously to the extent and interest of pathological investigation. He was pleased to think that he was to be succeeded by so eminent a man as Mr. Hulke, one who was in sympathy with pathological work in every department, and whose wide knowledge could not fail to be of great service to the Society. A vote of thanks to the retiring vice-presidents and members of Council was moved by Dr. Day, seconded by Mr. Pearce Gould, and carried unanimously. Dr. Southey proposed a vote of thanks to Dr. Payne, the retiring hon. sec., and bore personal testimony to the great amount of work entailed by such an office, as well as to the great demands upon the holder's kindness and courtesy. Mr. Clutton seconded it, and spoke warmly of the claims of Dr. Payne to the gratitude of the Society. This resolution was carried with applause, and Dr. Payne, in acknowledging it, said that although the duties of his office had been arduous they had been pleasant. He had always considered the Pathological Society the best of all the societies, and the strongest evidence of this was that the other societies were adopting their method of objective demonstration. The following are the officers of the Society for the ensuing year:—President: Mr. John Whitaker Hulke, F.R.S. Vice-Presidents: Mr. William Bowman, F.R.S., Dr. Thomas Bazzard, Dr. William Henry Broadbent, Dr. Andrew Clark, Mr. John Croft, Mr. Arthur Edward Durham, Mr. Jonathan Hutchinson; Dr. Samuel Wilks, F.R.S. Treasurer: Dr. George Johnson, F.R.S. Honorary Secretaries: Dr. James Fredk. Goodhart; Mr. Henry Morris. Council: Dr. Robert Barnes, Dr. John Cavafy, Dr. John Carnow, Dr. Frederick Akbar Mahomed, Dr. Joseph Frank Payne, Dr. George Vivian Poore, Dr. R. Douglas Powell, Dr. Frederick Thomas Roberts, Dr. George Henry Savage, Dr. Reginald Southey, Mr. W. Morrant Baker, Mr. William Harrison Cripps, Mr. Alban Henry G. Doran, Mr. Alfred Pearce Gould, Dr. Thomas Ridge Jones, Mr. John Langton, Mr. R. Clement Lucas, Mr. Edward Nettleship, Mr. Robert William Parker, Mr. William Johnson Walsham.

RADICAL CURE OF PROLAPSUS UTERI.

DR. CANEVA, of the Ospitale Maggiore at Milan, comments, in the *Gazzetta degli Ospitali* of Dec. 20th, 1882, on the unsatisfactory results of mechanical supports, and of vaginal plastic operations, in the treatment of complete uterine prolapsus. He recommends an alternative operation, with the object of suspending the womb from above, by promoting adhesions between its body and the parietal peritoneum in the hypogastric region. The patient is to be kept in bed for some days before the operation, to maintain the uterus reduced. The bowel having been cleared by injection the previous evening, and the bladder emptied just before anæsthetisation, whilst the patient is lying on her back, the operator introduces a metallic sound, and entrusts it to a competent assistant, with instructions to maintain the anterior surface of the uterus in contact with the abdominal wall. Commencing at a point two inches from the pubis, an incision is to be made three inches upwards along the linea alba down to the peritoneum over the body of the womb, which can be felt by the finger with increasing distinctness as the division of successive layers proceeds. So soon as the peritoneum is reached, the most delicate stage of the operation is entered upon. The wound is to be enlarged transversely, and an area of peritoneum at least an inch and a half in diameter exposed, by drawing aside the margins of the wound and detaching the serous membrane with the handle of the bistoury or with the finger. The assistant holding the womb fixed with the sound against the exposed peritoneum, the operator, with a fine needle threaded with catgut, sutures the parietal peritoneum to the corresponding serous investment of the womb. The sound is not to be withdrawn, until the surgeon has satisfied himself that the proceeding has resulted in the effectual suspension of the uterus to the abdominal wall. In closing the wound, two or three of the stitches are to include the peritoneum. The whole procedure is to be conducted with strict antiseptic precautions and Listerian dressings. Dr. Caneva has not given any clinical results, but promises a further contribution.

M. GAMBETTA.

NOW that M. Gambetta is no more, the French papers are unanimous in pointing out that the symptoms manifested for several days before his death left no room whatever for any reasonable hope of a recovery. As a matter of fact, the press took its tone during his illness from the reports of the medical attendants, and, with few exceptions, held out prospects of a speedy convalescence. The exceptions were mainly in the case of publications that advocated a policy hostile to M. Gambetta, and their ominous forebodings were rather the expression of rancorous feeling towards an antagonist than the record of any supposed probability. It is now said that the reason the bulletins were so reassuring, even to the end, is that the medical attendants were anxious to prevent M. Gambetta ascertaining the real gravity of his case, which he would have done had the reports been exact, inasmuch as he could not be induced to abstain from reading the papers; but this is probably true of the last bulletin only, issued when the sufferer's condition was hopeless. As a matter of fact, the amount of adipose tissue rendered an exact appreciation of the local condition somewhat difficult; besides which, the real state of the general health, although no doubt known to his personal physician, was not sufficiently taken into account by the consultants, and the false appearance of strength led them in the first place to adopt a too lowering diet, and secondly to overlook the possibility of a sudden break-down. Now that a retrospective view can be taken, and it is known that M. Gambetta was intermittently diabetic, emphysematous, subject to varicose veins and occasionally to hæmoptysis, besides being overloaded with fat, it will easily be understood that it was in the highest degree imprudent for such a patient to be kept lying for weeks in bed on account of some local mischief in the forearm, and without the bowels being kept in a satisfactory condition. Had he been a more obscure person, M. Gambetta would have had fewer attendants, and probably have been out in his garden at the expiration of a week or so with his arm in a sling; but occupying a prominent position, it was considered advisable to multiply the number of physicians and surgeons, and to enjoin upon him the most absolute rest. As in the case of President Garfield, it was perhaps the means employed that defeated the end in view, the constipation resulting from the rest in bed being not improbably the determinating cause of the peri-cæcal inflammation, which rapidly extended to the cellular tissue of the abdominal cavity. To what extent each of the seven physicians and surgeons who signed the bulletins examined their patient at each visit it is not necessary to inquire. To say nothing of the impropriety of repeated examinations in such a case (and it is evident that those who abstained from examination were little able to follow the progress of the case), the moral effect produced by such an invasion of medical men must have been anything but salutary. If, as

has been stated by the *Figaro*, M. Gambetta was credulous as regards *clairvoyance*, and had been warned shortly before by a *somnambule* that a catastrophe of some kind was imminent, it must have required some more than plausible explanation to account for the presence of so many doctors. It is somewhat strange that amongst so many eminent members of the profession there was no one able to detect the irreparable mischief going on. On Saturday evening the greatest confidence was entertained as to a speedy recovery, and Professor Charcot remarked to one of his friends, a deputy, that M. Gambetta had not the appearance of a man who was going to die. The bulletin issued on this occasion was to the effect that, although the general condition remained the same, there was an improvement in the local disease. On Sunday morning M. Gambetta was thought to be better, but in the afternoon a decrease in the body temperature made M. Lannelongue very uneasy; and whilst writing an optimist bulletin destined to be seen by the patient, he expressed his opinion that the end was near. The post-mortem examination of the body made by Professors Paul Bert, Brouardel, Charcot, Cornil, Trélat, Verneuil, assisted by Drs. Lannelongue, Siredey, Fienzal Lionville, Mathias-Duval, Laborde, Gardat, and Gille, gave the following results: There was an old inflammation of the bowel which had given rise to a narrowing of the small intestine and of the ileo-cæcal valve. There was extensive purulent infiltration behind the colon and in the abdominal wall. A slight peritonitis had developed during the last hours of life. The other organs presented no lesions. To sum up, M. Gambetta died of perityphlitis and pericolitis, for which any surgical intervention could have only been dangerous. M. Gambetta belonged, it is said, to the Société d'Autopsie Mutuelle, the members of which direct that a scientific examination of their brains should be made after death. M. Mathias-Duval has found that in the case of M. Gambetta, an important peculiarity exists in the third frontal (or Broca's) convolution. The brain as a whole is well developed, and of considerable size.

THE DEMERARA MEDICAL SERVICE.

WE are glad to find that the Lieutenant-Governor of Demerara and the Government Secretary have both officially expressed their desire to place the Immigration Medical Service of Demerara in a more satisfactory condition. We are not dismayed to hear that they speak of our action in calling attention to the terrible state of the service in uncomplimentary terms, and the irritation manifested by these officials is the strongest evidence of the justice of the course we have adopted. We believe that an honest inquiry into the grievances of the medical officers will now be made, and, until the contrary be demonstrated, we shall continue to hope that this service, which the secretary states should be "the finest in the world," may occupy a satisfactory place. The secretary expressed his anxiety to see each of the medical officers provided with a suitable house in the centre of his district. This would remove one of the drawbacks of the service, and we hope soon to hear of its adoption. But in his speech on this subject at the Court of Policy, the Government Secretary gave as a reason for the unsatisfactory state of the service, that the medical officers were overpaid! He is reported to have said that when a young man went out there who had probably been getting £60 a year in England, and found himself at once in possession of £600 or £700 a year, it demoralised him. At the same meeting it was complained that the men who went out there were those "who had tumbled about the world and found they could not get on in other countries." It is unfortunately true that it is but rarely that a newly qualified man can earn £600 a year in this country. How, then, is it that this bait does not command the services of the very best of our diplomates? It is notorious that even this scale of remuneration is not successful in attracting many of the better men entering the profession. This fact alone is surely ample proof that there is something wrong, some defect in the service, for it is not to be explained on the ground that the advantages the service offers are not known. The profession has lost confidence in this service, and whether they halve or double the salary will matter little now. What is required to establish it on a satisfactory footing is such a remodelling as will renew confidence and afford due security against arbitrary dismissal and lesser forms of official tyranny. The Lieutenant-Governor made a suggestion which, if carried out, would go a great way towards setting matters right—viz., to place both the immigration medical service and the general medical service under one supreme head—"a professional gentleman who would command the respect and obedience of the members of this service." In reference to the amount of the salary, it is well known that in view of the great cost of living, and the heavy expenses necessarily falling upon the medical officers, apart altogether from the special nature of the duties, it is by no means excessive.

THE PROPRIETORSHIP OF WATER ANALYSES.

WE have received a curious correspondence which has taken place between a resident in a rural sanitary district in the West of England, the sanitary authority of that district, and the Local Government Board. Our correspondent, the resident in question, suffers from diphtheria in his household; his house is very properly examined by the officers of the sanitary authority, and certain structural alterations of the drainage, together with an analysis of the well water, are ordered. The former being carried out, our correspondent applies to the sanitary authority for the results of the analysis, in order that he may know whether the water "is fit for use or otherwise," but both this and a second application to the same effect meet with refusal. Application is then made to the Local Government Board, from whose letters we gather that the results of the analysis were such as to call for a cleansing of the well; but our correspondent learns from that Board, which avoids an expression of opinion as to the actual case under consideration, that it would seem to them to be a matter for the discretion of the sanitary authority whether to give or to withhold a copy of the analysis of the water on his premises. Later on our correspondent receives from his landlord, who, it is alleged, is a member of the sanitary authority, notice to quit. The analysis, having admittedly been made at the cost of the authority, cannot, of course, be regarded as belonging to the occupier, but the expenses were defrayed out of the rates, and hence the statement of the authority in their letter to the Local Government Board to the effect that to have supplied an occupier with a copy of the analysis of a water belonging to a house where his family had suffered from diphtheria "would have been to create a dangerous precedent," is certainly one of the most extraordinary we ever met with. The occupier could, of course, have procured a second analysis at his own cost; but that he should be compelled to take such a step when there is already one in the possession of the authority is, considering the sanitary antecedents of the dwelling, a most unjustfiable proceeding. The latest phase, however, of the transaction is one as to which we may congratulate our correspondent. Residence in a house where the drain, hitherto an "uncemented stone culvert," lies "within six feet" of the well, can under no circumstances be desirable; but when, in addition to this, diphtheria supervenes, and a chemical analysis is regarded as pointing to the need for a cleansing of the well, a notice to quit should be regarded as an auspicious termination of the proceedings. Speaking generally, we would advise all householders who are similarly

circumstanced not to wait for a notice to quit premises where wells lying near drains need to be subjected to a process of cleansing; for the process cannot be regarded as touching the source of pollution itself—namely, the contaminated condition of the surrounding soil.

"OVERLAIN."

THE *Sussex Daily News* of Dec. 28th records another name to be added to the ghastly roll of children suffocated in bed, or, to use a well known and too familiar expression of children overlaid. The mother at the inquest deposed that she took the child, aged four months, to bed with her about half-past eleven. She fed it about two o'clock, and waking up again at twenty minutes to six found the child dead. It was lying *under* her left arm. She and her husband and two children slept in one bed. Dr. Arthur, who was called in when the child was discovered to be dead, in the course of his evidence very properly expressed a wish to direct public attention once more to the great sacrifice of infantile life in the country caused by children being overlaid. He suggested that when it was not possible for the parents to obtain a crib or bassinette for a child, they should get an orange-box, which could almost always be had for the asking. The substitute recommended by Dr. Arthur is a perfectly suitable one, and his remarks are practical. We fear that many an infant holds its life by a feeble thread. If its parents have "a good night," all is well; but if they have exceeded the bounds of moderation in eating and drinking, or are unfortunately troubled with nightmare and dreams which cause restlessness, the life of the infant is imperilled and often sacrificed. No doubt in many cases genuine sorrow is felt, and contrite tears are shed, but the evil still continues to be a reproach to our nineteenth century humanity and civilisation.

THE FUNCTION OF THE PANCREAS IN FEVER.

DR. STOLNIKOW of St. Petersburgh gives, in a communication to Virchow's *Archiv*, the results of his observations on the changes in the activity of the pancreas in fever. He refers, in the first place, to the well-known disturbances of the digestive organs that accompany and characterise febrile states of the system; to the thirst, dryness of tongue, nausea, loss of appetite, and abdominal pain; to the changes in the salivary secretion observed by Mosler, such as the deficiency in its quantity, its acid reaction, the absence of sulphocyanide of potassium and of the diastatic ferment, so that it is incapable of converting starch into sugar; and again to the changes observed by Manassein in the gastric juice, which, like the saliva, is diminished in quantity, and so altered in properties that it cannot exert its proper digestive power. But he says few or no attempts have been made to trace the changes occurring in the pancreas and its secretion, though there are good *a priori* grounds for believing that corresponding changes would occur. As the pancreas secretes a fluid containing powerful diastatic and fat disintegrating ferments, as well as a ferment acting on albumen, the inquiry has a special interest for Russian physicians, since many of the inhabitants of the more remote provinces are chiefly fed on starches and fats. In his experiments he first made a pancreatic fistula in accordance with the directions in Cyon's "Methodik," and after ascertaining the normal mode and kind of secretion, he injected purilage into the dog on which the investigation was made. The result was that the quantity of the pancreatic secretion was at first augmented to a considerable extent, the rise being from 2-3 ccm. per hour to 70-79 ccm. per hour. This effect was brief, and was followed by diminution, and when the quantity had diminished the increase usually observed after the ingestion of food failed to occur. The cause of the increase in quantity he considers to be excitation of the secretory nerves of the gland by the septic poison; its subsequent arrest he attributes to the paralysis of the nerves, the septic poison in fact acting in the same manner that atropia does on the nerves of the salivary glands. In regard to the quantity of the special ferments contained in the pancreatic juice, they also would appear to be at first augmented and then diminished, the diminution being occasioned by the depressing influence exerted by the septic poison both upon the trophic nerves and upon the cells themselves, in which pathological processes are established. The influence of the fever in producing a persistent depressing effect is greatly in excess in its duration over its exciting effect, and hence he considers that the employment of pilocarpine in fever has a logical foundation.

HOLIDAY TASKS.

WHILST reforms are going on many abuses continue, and one of the perpetuated abuses of the present day is the spoiling of a boy's holiday by what is termed a holiday task. In theory a great deal may be said in favour of it; in practice every argument is against it. Boys are worked much harder now than formerly, and it is essential that those who work hard should give their brains periods of perfect rest. What would the master say if his holiday were weighted with so many hundred lines to learn, or so many pages to read through and get up? He would conclude that a holiday under such conditions was no holiday at all. If this be the case with the master, how much more irksome and injurious is the holiday task to the boy. The excitable brain of a hardworking intelligent boy who tries always to head his class requires perfect rest for a time, and the object of the holiday is defeated by the task which is always before him. The task is a constant sore to him, and is generally put off to the close of the holidays, when his last days at home are ruined by it. To the lazy boy the holiday task is of comparatively little consequence, as he either does not do it, or only does it in an inefficient manner, and experience has taugh him that most masters will accept the holiday work prepared in a very perfunctory way. Why, then, continue the holiday task, which is positively detrimental to the industrious boy who requires brain rest, and which the idle boy only scamps?

THE HEALTH OF SUNDERLAND.

THE large mortality which has recently prevailed in the borough of Sunderland has led to several important discussions in the Town Council, and special attention has been directed to the state of a portion of the system of public sewers which, it is alleged, are in several respects of such faulty construction as to necessitate stagnation of contents and hence the emanation of foul gases into the thoroughfares. The Hendon Burn sewer is spoken of as being specially defective in these respects, and it has been reported to the Health Committee as being laid at a lower level than its outlet. Some dissatisfaction is also locally expressed as to the large amount of time which the medical officer of health has to devote to the supervision of the scavenging of privies and ashpits throughout the borough. In Dr. Yeld's time these duties involved even such details as the purchasing of horses and provender, and the Local Government Board have more than once expressed their objection to the imposition of such duties on an officer of health, especially in a borough where the due performance of the proper duties attaching to that office would fully suffice to occupy all the time of such an officer. The mortality for Sunderland has often been far higher than it should be, especially in view of the great physical and other advantages which this marine borough enjoys, and we trust

that every effort will be made to eradicate the causes of the unnecessarily high death-rate which continues to prevail there. At a recent meeting of the Town Council it was moved that the borough engineer be directed to make a special report as to the work which would be required in order to open out two of the outlet sewers. The voting was equally for and against, and since the mayor declined to give a casting vote on the ground that there was not a quorum present, a subject having such important bearings on the health of the borough has been allowed to stand over.

PARKES MEMORIAL PRIZE.

THE triennial Parkes Memorial Prize of £100, with gold medal (value £15), has been awarded to Mr. R. J. Polden, B.A., M.B. Univ. Dub., officiating surgeon to His Excellency the Viceroy and Governor-General of India, for his essay "On the Effect of Hygienic Measures in arresting the Spread of Cholera." The subject for the next prize is the following: "On the Prevention of Disease among Troops during Military Operations in Tropical and Subtropical Climates," to be illustrated as far as possible from the general experience of the author. Essays to be sent in to the Committee of the Parkes Memorial Fund, care of the Secretary (Surgeon-Major G. E. Dobson, M.B.), Royal Victoria Hospital, Netley, on or before Dec. 31st, 1885. Each essay to have a motto, and to be accompanied with a sealed envelope bearing the same motto, and containing the name of the competitor. The competition is open to the medical officers of the Army, Navy, and Indian services, of executive rank on full pay, with the exception of the assistant professors of the Army Medical School during their term of office.

THE DIRECTORATE OF THE GREENOCK INFIRMARY.

THE oft-debated point of the desirability of the staff of a hospital being represented on the Board of Management of a hospital has just been raised at Greenock. It appears that up to November, 1853, the physicians and surgeons of the infirmary were *ex officio* directors, but in that year they lost this privilege on having a remuneration for their services granted to them. The Medical Society of Greenock in 1881 petitioned the directors to elect either two members of the staff or two other medical men on to their Board. This suggestion was considered, and it was referred to the staff for their opinion. And at this point, unfortunately, the proverbial disagreement of doctors comes in. The staff, unable to agree upon a joint report to the directors, replied individually—Drs. Paton, Macdougall, and Black in favour of the proposal, and Dr. Wallace against it. Dr. Wallace suggested that the staff should constitute a Medical Board to advise "the directors on all matters affecting the management of the wards and the treatment of the patients." In view of this difference of opinion, the directors have resolved not to recommend any alteration in the existing composition of the directorate. It does not admit of argument that a hospital can only be really efficiently managed when lay and medical governors share in the responsibility. But there is room for difference of opinion as to the best mode of securing this arrangement. In well-managed hospitals the actual result is the same, and the lay governors seek and rely upon the aid and advice of the staff and of other scientific men in matters concerning the internal working of the institution. Where there is not mutual confidence between all the officials of hospitals, disorder and often disaster must ensue. We have no doubt whatever that the patients of the Greenock Infirmary would benefit by a due representation of the medical profession on the Board of Directors. But we regret extremely that the attainment of this end should have been, at any rate temporarily, lost by the inability of the four members of the staff to agree upon the exact mode in which it should be secured. The difference between their forming a Medical Board to advise the directors and having two of their number among the directors is of trivial importance. In either case their opinion would be likely to have proper weight with the lay directors. We trust that the medical staff and the lay directors alike will put aside any feelings of jealousy that may have been aroused during the recent discussions, and simply endeavour to secure, in the simplest manner and with least friction, the end which all must have at heart.

THE ADMINISTRATION OF CHLOROFORM TO CHILDREN.

WE regret the fatal case of chloroform administration which has recently occurred at the Children's Hospital, Great Ormond-street. The facts are as follows:—A little girl, aged five years, was suffering from disease of the knee-joint, and an abscess in connexion therewith required to be opened. According to the newspaper report, "but little chloroform had been administered—enough to dull sensibility," and after the necessary incision had been made, the duration of which was only momentary, it was found that the heart had ceased to beat. Artificial respiration was at once adopted, but without avail. A post-mortem examination, which was made by Mr. Pepper, revealed nothing special, and death was considered to be due to "syncope produced by the influence of chloroform." The coroner's jury seems to have taken a reasonable view of the case, only appending to their verdict the suggestion that, if practicable, parents should be informed when it was proposed to give their children chloroform. We are far from wishing to minimise the importance of this accident, infinitely rare as it must be admitted to be. In no branch of practice has the use of chloroform been more precious than in that of children's diseases—alike in saving the patient from terror and actual suffering, in rendering the surgeon important aid, and, it must be added, not unfrequently in assisting the physician in various methods of diagnosis. So widespread has been the confidence in the safety of this anæsthetic for children, and so much more manageable has it been found than ether, that in children's practice the employment of chloroform has scarcely been challenged. But this accident ought to induce all who have to give anæsthetics to seriously reconsider Mr. Warrington Haward's valuable experiences on Ether Administration, published years ago, many of which, it may be added, referred to children. Without venturing on any special criticism of the Children's Hospital case, we may state our strong conviction of the importance of two points in chloroform administration alike in children and adults—(1) That the risk of cardiac failure is diminished by giving a small quantity of alcohol a short time before the chloroform; and (2) that when any operation, however slight, is contemplated, complete is far safer than partial anæsthesia, in which the reflexes are only blunted.

A HIDDEN DANGER.

RAILWAY travellers, seated in comfortable arm-chair carriages, little think that if an axle or tyre should break, or a wheel come off, connected with the coach in which they are riding, in the absence of means of communication with the guard or driver, they cannot stop the train. And as a matter of fact, there is frequently no communication with the guard or engine-driver; and the passengers in the carriage, in a case of accident such as that mentioned, must be dragged on for several miles, and probably cut to pieces. What should we say of coach-builders who neglected to provide a cord to

stop the driver in case of accidents? The universal adoption on railways of cord communication would also be a protection against murder or robbery, and afford a sense of security to passengers, all the carriages being connected one with another from the engine to the guard's van. No long-distance train should be without means of communication of some sort. The time will come when it will be considered criminal for directors of companies to omit this necessary and important precaution.

"THAT IS OUT OF THE QUESTION."

THIS was the remark recently made by the chairman of a board of guardians, when asked whether it would not be proper for one of their medical officers to have a qualified medical man at home when he happened to be absent, so that the sick poor might not be left to the mercy of an unqualified attendant—"That is out of the question." This shows how deplorably ignorant the guardians of the rates—we can never call them guardians of the poor—really are. An equally ridiculous observation was made by a member of the board in the course of the same discussion: "How is a man to get qualified, if he doesn't have a little practice?" The chairman did not see anything wrong in the attendance of an unqualified assistant, because "there are a good many unqualified people visit the poor. I believe sisters of mercy do so, and they are not qualified." Obviously it would be waste of words to try to enlighten the ignorance of persons who think that students ought to be let loose in practice among the poor for the sake of experience; and who do not see any difference between the visits of a sister of mercy and those of an unqualified student assistant who acts in the name of the medical officer! If these guardians will ask their clerk for a copy of the Consolidated Order, they will find that every medical officer is required to name a deputy who must be qualified. It is their duty to see that the deputy so named, visits the sick poor in the absence of the medical officer himself. By conniving at the practice of unqualified assistants boards of guardians are distinctly acting in a manner which calls for the interference of the board at Whitehall. We shall see whether Sir Charles Dilke has the energy and acumen to enforce the Order which guardians systematically violate.

GROCERS' LICENCES AND THE WOMEN'S PROPERTY ACT.

SOME three years ago, when we made an energetic but, as it unhappily proved, a vain, endeavour to influence public opinion in favour of the total abolition of grocers' licences to sell spirits and wines in bottles, we pointed out how women obtained intoxicating beverages under cover of "groceries," and how grocers not uncommonly gave Christmas presents to customers and their servants in the shape of bottles of brandy, whisky, or wine. At a recent inquest on the body of an old woman, who was found dead in her bed after a drinking bout, it was stated that a bottle of whisky which had been presented by the grocer was found under the bedclothes nearly empty, but still clutched by the poor victim of this false kindness, although the hand with which she seemed to grasp it was dead. This is only an incident, but it shall serve to show how this most mischievous licence tells against public and social prosperity. Now that women are to have it all their own way with what they are pleased to call "their own" money, under the very equivocal Act, passed almost without notice last session, and which came into force on the 1st inst., there will be extended opportunities for the secret traffic in liquor, and husbands will have no means of controlling the expenditure of their wives. Probably hereafter, when much dire and irreparable mischief has been wrought, it will be seen that this State facility for the secret pursuit of vice, "the grocers' licence," ought to be abolished. Under the new Act women can—though for a time at least it is scarcely likely they will—open direct accounts with the wine merchant for their clandestine consumption of brandy and sherry.

THE NEW PRESIDENT OF THE LOCAL GOVERNMENT BOARD.

WHEN Mr. Dodson was appointed to the Presidency of the Local Government Board with a seat in the Cabinet, we hailed him as practically "Minister of Health," and ventured to draw a hopeful augury from his known habits of earnestness, energy, and business tact. It is needless to say that our anticipations were egregiously falsified by experience. Mr. Dodson was no more active in the development of his department than his predecessors had shown themselves. In fact, to speak plainly, since the brief supremacy of Mr. Gathorne Hardy (now Lord Cranbrook) at the Poor-Law Board, there has been no period of life in that organisation, whether in its separate state of existence or as associated with the Board of Local Government. A fatal narcotism seems to fall on the brains of ministers who take office in this department. Doubtless, the Board is a very Augean stable; but is it wholly and finally impossible that it should be cleansed? Sir Charles Dilke has hitherto been noted for boldness, independence, and spirited industry. Has he the wit and the courage to set the house at Whitehall, over which he is now called to preside, in order? Time alone can answer the question. We will not adventure a prophecy. The utmost that seems reasonable is to express an earnest hope that where other good and true men have conspicuously failed, the talented and out-spoken member for Chelsea may make his influence felt and succeed.

DEATHS AT FOOTBALL MATCHES.

THE ink was scarcely dry on the paper on which we had penned a few remarks concerning the sad death in the football field of a young man at Belvidere, Kent, only a few days ago, when we received intelligence of two similar occurrences—one at Dulwich, the other near Bolton. In all three cases the death was attributed to heart disease. In the case of the death at Belvidere the medical man who saw the deceased attributed death rather to shock to the central nervous system than to actual cardiac mischief. Still in this case there was evidence that the patient was suffering from a "weak heart." In such a case a shock to the nervous system would no doubt tend to produce fatal syncope. No external injuries were found on the bodies of any of the victims; they died apparently in each case from shock and failure of the heart's action. We have frequently spoken in condemnation of football as a game, as played according to the present rules. Casualties among the players are extremely frequent, and we have recorded in these columns an enormous number of fatalities. It has been urged against our objections to the rough-and-tumble nature of the game, and its extreme danger, that the risks attending it are not greater than what occur in the hunting field or in Alpine climbing. This objection, even if true, would not stand, since the argument that because one amusement is dangerous another equally dangerous may be permitted, is absurd. But the cases are not parallel. In the hunting field at least, if a man comes to grief it is the fault of himself or his horse; nobody lives to blame himself for having crushed or stamped the life out of a fellow creature. But not only ought the rules to be modified to prevent injury to the strong and healthy, but it should be made incumbent on secretaries and captains of football clubs to see that no member of a club be allowed to engage in club matches unless free from heart or other organic disease. In no game played is there such stress

thrown on the circulatory system, and a "heart" that might stand any ordinary strain gives way under such pressure. A fuller inquiry than can be held at a coroner's inquest is called for when such deaths occur. At present the verdicts of the coroners' juries are not satisfactory; the deaths may be "accidental," but they are preventable. We fear too that many acts of undue violence are often hushed up, "out of consideration for the feelings of others."

ARMY MEDICAL DEPARTMENT.

SURGEON-GENERAL SIR J. A. HANBURY, the Principal Medical Officer of the Army of Occupation in Egypt, has been ordered home for the purpose of being examined on the subject of the medical arrangements in the late war, and has been replaced in the medical charge of the troops by Deputy Surgeon-General J. Irvine, M.D., with the local rank of Surgeon-General. Dr. Irvine has been employed for the last five years as Head of the Sanitary Branch of the Army Medical Department at Whitehall-yard, and we trust the special knowledge which he must have acquired in that position may be turned to good account in improving the sanitary condition of the troops in Egypt. Dr. Irvine has been succeeded as Head of the Sanitary Branch at head-quarters by Deputy Surgeon-General Marston, lately the Sanitary Officer with the army in Egypt. As we recently noticed Dr. Marston's special qualifications for a sanitary charge (THE LANCET, July 29th, 1882) it is unnecessary to say more than that we believe it would be impossible to find an officer in the Department better qualified in every way to fill the important post for which he has been selected.

CHLORAL-POISONING.

AT an inquest on the body of a lady who had died from the effects of an overdose of chloral, a juryman innocently remarked that the bottle which had contained "the chloral was not labelled 'poison' as he thought it ought to be." Chloral is not classed as *poison*. It *is* one of the most dangerous, because insidious, of poisons; but, unhappily, the law—and we regret to say some members of the medical profession—do not so regard it. Because in certain small doses chloral or chloral hydrate produces a slightly comatose condition which burlesques sleep, and which those who are ignorant of the real nature of "physiological rest" mistake for sleep, the public are permitted to employ, and medical men do not scruple to recommend, these pernicious poisons as though they were innocuous. It is high time that attention were directed to the subject of "narcotics" generally, and the use of chloral and bromide of potassium in particular. Incalculable injury is being done, and public opinion is being grieviously misled by the tolerance given to the use of "sleeping draughts," *falsely so-called*. In regard to this matter and that of the reckless use of hypodermic injections of morphia, the profession should seek to form a deliberate judgment and gravely deliver itself. At the present moment we lie under a heavy responsibility, which it is idle to deny and vain to disown.

POTTED PUTRESCENCE.

IN addition to the perils which lurk in the pot and its accessories in connection with "potted meats," we are now being brought face to face with another source of danger and annoyance. It seems that the meat itself is too often putrid, or very nearly so, before it is preserved. In fact, if we are to accept the obvious inference from recent revelations in the potted meat and sausage trade, it must be recognised that the preparation of food by mincing and "preserving" offers special facilities for the disposal of material which would otherwise be useless on account of commencing decomposition. The matter is so serious that it becomes a question of expediency whether, looking to the knavish practices to which unscrupulous tradesmen resort, it is safe to use a preparation which, for aught the consumer can tell, may have been compounded of foul and poisonous substances with which he would not feed the dogs in his kennel. If the public would be safe potted meats must be eschewed altogether. The admixture of spices and the general treatment of the flesh reduced to the consistency of paste, render it impracticable for any unskilled person to determine whether what he has purchased is fit for food, and as tradesmen are not to be trusted it would perhaps be better to forego the use of potted meats altogether.

M. DAUDET AND THE SALVATION ARMY.

THE Salvation Army, incredible as it may seem to those who are familiar with the sceptical disposition of the French people, has nevertheless succeeded in establishing its influence in Paris. The fact has been brought home to one of the most able novelists among that brilliant phalanx of fiction writers who distinguish French literature. M. Alphonse Daudet, the author of "Les Rois en Exil," happened to surprise the governess, to whom he had entrusted the care of his children, at a moment when she was giving way to the most heart-rending grief. On inquiry, it proved that her daughter had become a Salvationist, had renounced home, mother, all, to follow "General" Booth. Impressed by the domestic havoc wrought by these fanatical excesses, M. Daudet devoted many months to the most careful study of the entire movement, and this has resulted in the production of his latest novel, entitled "l'Evangéliste." M. Daudet has accumulated matter for a huge brief to prove the accuracy of his novel as a truthful portrait of what is actually occurring. The principal characters, Mme. Ebsen and Elina, are, of course, his own governess and her daughter. This remarkable work, while expressing the utmost reverence for true religion, treats the extravagances of the "Salvationists" as a mania, and the result of physical rather than moral disorder. It is on this ground that M. Daudet has dedicated the book to Dr. Charcot, as the most renowned specialist on nervous and mental disease. After carefully perusing the work, Dr. Charcot has addressed the following characteristic letter to M. Daudet, which we translate literally:—"I am most gratified, dear colleague and friend, by the honour you confer on me by dedicating to me one of the finest 'observations' of your clinic. I thank you with all my heart, CHARCOT."

SUNDAY CLOSING OF PUBLIC-HOUSES.

THE Home Secretary has given an answer to an application to receive a deputation on the subject of Sunday closing of public-houses, which seems to imply that the Government intend to deal favourably with this proposal. We understand that so many separate counties are petitioning for legislation in this direction that the Government can scarcely help bringing in the comprehensive measure promoted by Mr. Stevenson. Provided that care is taken not to go to extremes in large communities where many people are without proper homes of their own, we heartily heartily support this measure.

ALLEGED NEGLECT BY A BRADFORD SURGEON.

FALLIBILITY in a medical man is much more severely judged than in other men. A Bradford surgeon lately forgot to see a patient when he had promised to see her. The patient got worse and quickly died. It is, of course, very sad that a medical man should forget an important duty. But surely he was not so much to be censured as those about the patient who failed to remind him in time or to get another doctor.

MORTALITY FROM SNAKE-BITES IN INDIA.

SIR JOSEPH FAYRER contributes to *Nature* for Dec. 28th an article on this subject, to which, as is well known, he has devoted much attention, and that with great benefit to the natives and residents of India. As a result of the representations of Sir Joseph the Government have published a resolution which seems to indicate the carrying out of an organised scheme for the destruction of venomous snakes in the Dependency. And it is time that this matter should be taken up with intelligence and determination, seeing that in 1881 18,910 human beings fell victims to snake-bite. "For the purpose of destroying the reptiles it is absolutely necessary that a fixed system of rewards should be established," says Sir Joseph. These rewards, it would appear, have been given too indiscriminately, not sufficient care having been taken to ensure that the snakes killed were really of a venomous kind. Some improvement has, however, taken place both in the number of snakes destroyed and in the cost at which the extermination was effected. Thus in 1880 212,776 snakes were killed at a cost of 11,663 rupees, whilst in the following year an expenditure of 11,961 rupees was accompanied by the destruction of 254,968 of the venomous tribe.

INVALIDS AT CHRISTMAS.

REGARDLESS of consequences, invalids and persons of delicate constitution are often injudiciously urged to participate in the amusements and festivities associated with Christmastide. Relatives and friends insist, at any risk, upon their joining the family party, which ends almost inevitably, after the excitement of the evening has passed, in exhaustion or a serious relapse of the invalid, and in many instances long-continued illness. These cases are most disheartening to the doctor, who after having studiously treated the patient up to convalescence, finds one evening, as a result either of over-eating or drinking, catching cold, or unwonted excitement, all the good effects of his judicious treatment and care completely destroyed. Let those who at this season of the year have sickly relatives remember, "It is cruel to be kind."

EPIDEMIC OF SORE-THROAT.

AN epidemic of sore-throat has been prevalent in the neighbourhood of Kingston and Surbiton, and the anxiety caused by it is increased by the circumstance that its exact nature and origin are not as yet clear. From the imperfect information available, it would appear that the disease exhibits less of an infectious character than is usually the case when diphtheria is prevalent. But still the number of persons who have suffered is considerable. In 1880, some fifty cases and ten deaths from diphtheria were traced to an infected milk supply in Surbiton; but the district was singularly free from the disease in 1881. Although infected milk is suspected to have borne, at least, a share in the production of the present outbreak, no definite information as to this is as yet forthcoming.

DIPHTHERIA AT DEVONPORT.

AN epidemic of diphtheria has broken out at Devonport. Lieutenant Helyar, Royal Munster Fusiliers, who recently arrived at Devonport for military instruction, caught the disease and died, as has also the wife of Captain Brooke, late Commander of H.M.S. *Himalaya*. There have been other deaths, and the disease is prevalent in the residences of some of the highest military and naval officers. Efforts have already been made to check the spread of the malady and a communication has been made to the Local Government Board. It is considered probable that the Board will send an inspector to assist the authorities in the investigation.

THE authorities in Russia are evidently not in favour of the medical education of women. The lecture courses at St. Petersburg have been closed by order of the Emperor after an existence of ten years. The Government has deprived the institution of its buildings, and maintains that the institution had not sufficient means to carry it on properly. Subscriptions were promised, but every obstacle was thrown in the way of their collection. The experiment of female practitioners has evidently been a failure in that country at least.

THE *London Gazette* of the 2nd inst. announces that Her Majesty has been pleased to appoint Surgeon-Major J. E. Tierney Aitchison, M.D., I.M.D., and Surgeon-Major George Bidie, M.B., I.M.D., Superintendent of the Central Museum at Madras, to be Companions of the Order of the Indian Empire.

SIR WM. MEAD, Director-General of the Naval Transports, presided in the absence of the Earl of Morley, at the last meeting of the Army Medical and Transport Inquiry Committee. Several men of the Army Hospital Corps and Bearer Companies were examined as to the medical arrangements of the recent Egyptian campaign.

THE difficulty of securing the services of trained nurses at the new infirmary at Notting-hill has induced the guardians of the St. Marylebone Union to form a school for the training of their own nurses on the same system as the Nightingale Institution, in which they are assisted by its Council, and the same system is adopted as at St. Thomas's Hospital.

DR. BOND, medical officer of health for Gloucestershire, has reported to the Westbury-on-Severn Board of Guardians the existence in the district of a serious epidemic, which he believes to be diphtheritic croup. The fatality from the disease is considerable.

LORD DUFFERIN has addressed a letter to Lady Strangford, in which his lordship expresses his strong sense of the value and utility of the hospital at Cairo under her auspices, which, at the request of the Khedive, is to be called the Victoria Hospital.

THE death of James Arthur Wilson, M.D. Oxon, F.R.C.P. Lond., took place on December 29th, at Redlands, Dorking, at the ripe age of eighty-eight. The deceased was Consulting Physician to St. George's Hospital, but for some years had retired from active professional work.

LEWIS GEORGE WYNNE, assistant to D. M. Kennedy, M.D., has been fined £5 and costs for signing in Dr. Kennedy's name a certificate of successful vaccination. Dr. Kennedy said he never gave the prisoner any authority to use his name.

THE Spanish Government have received a telegram dated December 28th from their Consul at Suez announcing that cholera has appeared amongst the pilgrims from Mecca and Medina, and that the deaths from the disease at the latter place number ten daily.

THE Académie des Sciences at its last meeting appointed a committee, with M. Milne-Edwards as its president, to co-operate with the English committee for raising a memorial to Charles Darwin.

MR. LAWSON TAIT has been elected an Honorary Fellow of the American Gynæcological Society.

WE understand that Mr. Edward C. Garland, L.R.C.P. Ed., who has discharged the duties of Deputy Coroner for the South-Eastern Division of Somerset for some seventeen years, is a candidate for the Coronership of the Division, vacant by the death of Dr. Wybrants.

MR. J. T. PEARSON, surgeon, of Stockport, met with a fatal accident on Tuesday night. As he was returning home about eleven o'clock he was knocked down by a brewer's dray and killed on the spot. He was sixty-four years of age and was well-known and esteemed in the neighbourhood.

DR. ROBERT MCDONNELL and Dr. George Sigerson have been included in the commission appointed to inquire into the administration, discipline, and condition of the prisons in Ireland.

PROFESSOR HENLE, the anatomist, has been appointed Permanent Secretary of the Royal Academy of Sciences at Göttingen, in the place of the late Professor Wöhler.

THE scientific world and the many friends of Professor Owen will be sorry to learn that the state of his health is such as to cause great anxiety.

Pharmacology and Therapeutics.

ADONIS VERNALIS.

IN Russia the adonis vernalis is a popular remedy in cases of dropsy and heart disease. Experiments on its value have been made in the wards of Botkin, at St. Petersburgh, the results of which have been described by Dr. Bubnow in a graduation thesis. Under its influence, in cases of dropsy, the cardiac contractions increased in force, the pulse became less frequent, more regular, and fuller, the urinary secretion increased from 200 to 2000 or 3000 cubic centimetres, and albumen and casts disappeared from the urine. Experiments made on both cold-blooded and warm-blooded animals with different preparations of adonis (infusion, and both aqueous and alcoholic extracts) showed that its action is to stimulate both the inhibitory apparatus and motor ganglia of the heart, to increase the contractility of the cardiac muscle, and to cause the contraction of the small arteries in different parts of the organism, without affecting the vaso-motor centre. Dr. Bubnow believes that adonis is positively preferable to digitalis in cases of organic heart disease; and he finds that, like the convallaria majalis, it is not cumulative in its action. A glucoside "adonidine," containing the active principle of adonis, has been isolated by Cervello (*Archiv für Exp. Path. und Pharmak.*, 1882, p. 335). It is an amorphous, colourless substance, destitute of odour, of a bitter taste, soluble in alcohol, and feebly soluble in ether and water. Tannic acid precipitates it from its solutions, and the precipitate redissolves in an excess of water. When heated in contact with an acid, sugar is set free, and also another substance, soluble in ether. The effects on animals are apparently identical with those of digitalin.

CURARA.

It is known that curara may cause slight symptoms of excitation before the paralysis comes on. M. Couty has succeeded in isolating these symptoms by employing feeble extracts of strychnos triplinervia, or small doses of certain native preparations. By these means, in dogs, a new phase of intoxication may be presented for ten or even twenty minutes. In the first instance the animal is agitated, jumping, scratching, barking, as if in a state of general hyperæsthesia. Then it presents half choreic shocks or tremors; the pupils dilate, and are alternately dilated and contracted. The heart's action is increased or diminished in frequency; sometimes there is vomiting, micturition, or defecation; and there is always salivation. Finally, the central and peripheral temperature are raised, and the excitability of the muscles and nerves becomes highly increased. With the native preparation of curara it is impossible to prolong this stage, and symptoms of paralysis soon become associated with those of excitement. The choreic shocks were found to be arrested by section of the sciatic nerve. Other experiments proved that the spasms originated from the spinal cord, and were influenced by its preceding functional condition. If the cord was tied in the mid-dorsal region, and the curara injected, the spasms were still produced in the hind legs; but if, after the operation, the excitability of the posterior segment became lowered, the spasm was no longer produced in the hind legs. This dependence on a perfect functional activity is a point of difference of these spasms from those produced by strychnine and by asphyxia. The action of small doses of curara is not, however, limited to the spinal cord. The diminished frequency of the heart continues after section of the pneumogastrics, and will even occur if the pneumogastrics have been previously divided. From these facts it seems that curara must not be regarded as entirely destitute of a "convulsivant" action, nor of an action on the central nervous system.

BRUCINE.

The alkaloid brucine, which is associated with strychnia in nux vomica, has been comparatively little studied. It is generally said to have an action similar to that of strychnine, but less potent, and to be eliminated more rapidly. In a Geneva thesis Wintzenried has described a series of investigations, which seem to show that its action differs from that of strychnia in many important respects. Frogs present different symptoms according to their species. In rana esculenta brucine has a double action. It causes paralysis, apparently by acting on the termination on the motor nerves in the muscles, and it causes spasms, apparently by an increase in the reflex excitability of the spinal cord. The former influence hinders the manifestation of the latter, and it is only when the circulation is interrupted in some part of the animal so as to prevent the local action that the convulsive effect is manifested. In rana temporaria, however, brucine causes tetanic phenomena analogous to those produced by strychnia. Large doses also cause vaso-motor paralysis. Moreover, the sensitiveness to the poison is far less than in the case of rana esculenta. It is similar, in its action on the latter, to curare, since it is known that by replacing in many "convulsivant" alkaloids an atom of hydrogen by one of ethyl, methyl, or amyl a substance is obtained which has an action very similar to that of curara. The convulsions produced by brucine are, Wintzenried believes, of spinal origin. The encephalic centres are not affected, nor are the sensory nerves or the muscular sensibility. The heart's action becomes less frequent, and sufficient doses arrest the respiratory movements. In warm-blooded animals, however, the action of brucine closely resembles that of strychnia, but is less energetic. Asphyxia appears to be the chief cause of death. The heart's action is the last to cease. Large doses paralyse the vagus, while the motor nerves do not lose their excitability.

ANTIMONY.

The effects of chronic poisoning by antimony have been studied by Caillol and Livon, in order to ascertain whether its effect is similar to that of arsenic. Their experiments, described to the Académie des Sciences, lead them to the conclusion that the effects of the two poisons are nearly the same. They gave to a cat small quantities of the white oxide of antimony in milk, and the total quantity taken in 109 days was 628 gramme. There was no initial improvement in general health, such as is seen at first under the influence of small doses of arsenic. From the first the animal passed gradually into a cachectic state, diarrhœa supervened, and it died in a state of marasmus. At the autopsy, all the organs were pale, and presented a condition very similar to that met with in poisoning by arsenic. The liver cells were globular, tending to unite in consequence of a disappearance of the wall, and almost all contained abundant fatty granulations. The most striking changes were found in the lung. To the naked eye the greater part of the organ appeared to be transformed into a compact mass of fat. The alveoli, and even the lobules, were filled up by large degenerated cells, consisting almost entirely of fat. The mesenteric glands were in nearly the same condition as in chronic poisoning by arsenic. They formed large caseous masses, yellowish-white in colour, and, under the microscope, pre-

sented intense fatty degeneration, especially in the peripheral portions.

GLOBULARIN.

From the Globularia alyssum two principles were extracted by Walz—globularin and globularesin, and these have been tested experimentally by Heckel (*Gazette Hebd.*, No. 25). The former, injected beneath the skin of a frog, increases at first the frequency of the respirations and cardiac contractions, but subsequently both become slower, and the fall occurs very rapidly if large doses are employed. The animals become languid, their reflex action is lowered, paralysis gradually supervenes, and death occurs in about two hours and a half. The ventricle of the heart, post mortem, is empty and contracted. In man it was found that a daily dose of ·15 to ·45 gramme of globularin increases the quantity of urine, lessens the frequency of the pulse, and the temperature. Globularesin, in doses of ·10 to ·20 gramme, produces a purgative and diuretic action, while twice this quantity has a powerful drastic effect.

CHINOLIN IN DIPHTHERIA.

Excellent results have been described by Seifert in the treatment of diphtheria by chinolin (*Berlin. Klin. Wochenschrift*, No. 22). In a series of cases, slight and severe, of diphtheria in adults, and a smaller number of cases in children, the only case of death was that of a child, a year and a half old, rickety, ill-nourished, and the subject of constitutional syphilis. Instead of the unpleasant tartrate of chinolin hitherto used, Seifert prefers a 5 per cent. solution of pure chinolin in equal parts of alcohol and water as a local application, and a one-fifth per cent. solution in water with a little spirit and peppermint as a gargle. The stronger solution was applied with a brush from once to four times daily and a new brush used for each spot painted, those once used being destroyed by fire. Immediately after the application the patient feels a burning, smarting pain, which is soon removed by a little cold water, and gives place to a feeling of great relief, so that swallowing becomes easy, although before it was impossible; the fetor speedily ceases, the membranes come away in slight cases within twenty-four hours, the glandular swelling quickly subsides, and the temperature rapidly falls to the normal. The only other treatment adopted was an ice cravat in severe cases.

REPORT
OF
The Lancet Sanitary Commission
ON THE
TYPHOID EPIDEMIC IN PARIS.

To the English sanitary reformer there is no difficulty in explaining the presence of enteric fever in Paris; the marvel is rather that it should not be more frequently and generally prevalent. The causes of the epidemic are easy to demonstrate; if there is any problem it consists in defining which of the numerous agencies are the most destructive. It is, however, less easy to point out immediate and practical remedies where there are so many fundamental defects. Of the gravity of the epidemic we need say but little. We have already, at different periods, published statistics giving the number of cases characterising the present outburst. The following figures will, however, show that the disease may be considered endemic as well as occasionally epidemic. Putting aside the year of the war as fraught with exceptional circumstances, there were in Paris 903 deaths from typhoid in 1869, 938 in 1872, 952 in 1873, 823 in 1874, 1048 in 1875, 2032 in 1876, 1201 in 1877, 857 in 1878, 1001 in 1879, 2120 in 1880, 2133 in 1881, and 2842 deaths up to the 23rd November, 1882. With such eminent authorities as Dr. Bouchardat, we must conclude that the disease is endemic; and though there is now a fortunate and notable diminution in the number of cases, there is every reason to anticipate a further recrudescence of the disease when the circumstances are once more specially propitious to its development. Westerly or sea winds have been prevalent of late, and these, by their warm nature, have admitted of a greater amount of house ventilation; the population of Paris being led by reason of the mildness of the temperature to open their windows more frequently than usual at this season. On the other hand, the exceptional amount of rain which has fallen has contributed to the clearing and washing of the sewers. But next year, if the autumn should be dry, with easterly winds, there will probably be a renewal of the epidemic. Nevertheless, it must seem to all persons who have studied the subject that some at least of the causes are so palpable that to further neglect their removal will expose the persons responsible for the administration of Paris to the censure of civilised Europe.

To take one indisputable example: the overcrowding of low-class lodging-houses is an admitted fact and a recognised source of disease. Official reports on this subject have been presented to the Government over and over again by Dr. Du Mesnil, Member of the Committee on Unwholesome Dwellings. Thus according to statistics bearing the date of July 1st, 1876, there were 9050 poor lodging-house or hotel-keepers in Paris who provided beds for 142,671 tenants, while on October 2nd, 1882, though the number of lodgers had increased to 243,564, that of the lodging-house keepers was only 11,535. In other words, the lodging-houses had only increased by one-quarter, while the number of lodgers had doubled. Hence many rooms that formerly held but ten beds now hold twenty. Large rooms have been subdivided, and the overcrowding, always excessive, rendered absolutely unbearable. That this is directly connected with the increase of typhoid fever may be inferred from the fact that the quarters where this overcrowding is most noticeable are precisely those that have the most suffered from the fever. Thus the average mortality, according to Dr. Bertillon's municipal statistics, was up to October 10th last 38·5 per 100,000 of the Paris population; but in the eighteenth arrondissement or district of Paris the proportion of deaths was 58·7 per 100,000. Now, in this district the augmentation of lodgers was from 8933 to 20,816, and of lodging-houses from 601 to only 853. In the nineteenth arrondissement the death-rate from typhoid was 71·2; the increase of lodgers from 9074 to 17,662, of lodging-houses from 517 to 752. A similar lesson is taught by the statistics relating to the other districts. Public works, especially the building of new schools, have attracted an unusual number of foreign workmen to Paris, more than 127,000 during the last five years. These, for the most part young men coming from rural districts, are huddled together in unwholesome lodgings, often badly fed, never enjoy sufficient ventilation, and are always in close proximity with dangerous and foul drains. They are the ready victims of an epidemic. Surely in a country accustomed to arbitrary measures, a law similar to our Common Lodging-houses Act of 1851 could be easily enacted and promptly carried into execution, and thus this source of danger would be at once removed.

Unfortunately Paris is labouring under the inconveniences of divided authority. The principal laws affecting the maintenance of public health place the authority in the hands of the mayor; but there is no mayor for Paris, and the services are divided between the Prefecture of Police and the Prefecture of the Seine. Nor is there any medium between the sanitary societies, which discuss theories, and the administrative bodies, that have the practical work to do. Havre, Cannes, Rheims, Nancy, and many other towns, have their sanitary bureau; but in Paris there is no such institution, though Dr. Proust has ably urged that the creation of a sanitary board on the Brussels model would not only render the greatest service, but would not, even at the highest estimate, cost more than a yearly tax of twopence per head of the population. With the assistance of special sanitary officers, acting under the direction of a sanitary board, Paris might hope for something better than the two ambulance carriages for infectious cases and the one disinfecting oven it now possesses. Houses might then be fumigated, drains purified, fever dens closed, and mortuaries built.

These are but small details as compared with the all-important question of the water-supply of Paris. With so many other likely causes present, it would be impossible to say how far the deficiency of the water-supply has contributed to bring about the epidemic. It is well known that the waters of the Dhuys and the Vanne may be ranked among the best of any consumed in the large towns of Europe. Unfortunately, though we may know and select the districts supplied with this good water, every house is not connected. It is a question of price left to the option of the proprietor, who often prefers the cheaper and less pure sources. Nor is this all. Even in the houses which enjoy

the good supply, this occasionally fails, and then, without any warning, the water of the Seine or the Ourcq is furnished through the same pipes. That the latter two sources are unsafe is universally admitted, and Dr. Lancereaux in his report on the epidemic of 1879, declares that the majority of patients suffering from typhoid fever who came under his notice were in the habit of drinking the water of the Ourcq. Out of 380,000 cubic metres of water distributed in Paris, 105,000 come from the Ourcq. The Seine and Marne waters are also most impure. According to Dr. Rochard, the Marne receives the drainage, vegetable water, and so forth from a neighbouring population of about 80,000 persons, and this water is mixed with that of the Seine, while the latter is sometimes affected by the overflow from the immense human guano works at Maison Alfort. There is a promise, it is true, of a large increase in the water-supply, but this will be more useful for cleaning the streets, or flushing the sewers than for drinking purposes, for out of the total that will then be attained of 509,020 cubic metres per day, only 230,000 will be fit for drinking purposes. Still it would be possible to prevent the mixing of the good and the dangerous waters, to restrict the former strictly to household purposes, and also to keep a severe watch over private filters which too often become, through lack of cleanliness, sources of infection.

The increase of water-supply is the more necessary as the length and number of sewers are daily augmenting. Before the present system is completed, if, indeed, it is ever completed, 387,000 metres of sewers will have to be built. Better provision must also be made for the carting away of household solid refuse, which it is the custom to put out in the streets at night for the scavengers to take away in the early morning. This amounts to about 2000 cubic metres per day, while there are also the mud and sweepings from the surface of the streets, which measure in all 11,000,000 square metres. About 600 carts are required for this service, at a cost of £216,000 per annum. At Montreuil this mud is deposited very near to the streets, watered with dirty water, and converted into manure. Those foul depôts, the great guano factory of Bondy, the innumerable unwholesome industries which surround Paris, have often been accused of producing fevers, when the wind blows their bad odours and dust particles over the town. Though these fears are probably exaggerated, yet, as the suburban population increases, it will be indispensable to take greater precautions and further remove such sources of insalubrity.

To Englishmen, however, it will seem that the greatest of all evils is the absolutely barbaric condition of the house drainage. In this respect there is a total absence of sanitary knowledge. Though we have visited hundreds of houses in Paris, we have not found one single water-closet so constructed as to render the egress of sewer gas impossible. The necessity of a water-trap is not recognised. Even in the rare instances where it is applied, it is not accompanied by any system of ventilation, though it has so often been proved that where there is no ventilation to ease the pressure of sewer gas the water seal can be easily forced. The best French closets contain in the pan only an inch deep of water, and below the pan there is no trap. A huge pipe, which, on account of its size, cannot be kept clean by the very small amount of water allowed, communicates direct to the cesspool, and brings back from it all the foul effluvia. In other cases, instead of the cesspool, there is the *système diviseur*. A small iron cylinder is supposed to retain the solids, and allows the liquids to escape to the sewer. Thus the sewers are contaminated with a very fair proportion of fæcal matter in solution. On the other hand, the rain-water pipes and the pipes that carry away kitchen waste are now made to communicate direct with the sewer. Formerly they ran to the gutter, and thence down the street to the sewer mouth; so that the direct connexion between the inside of the house and the sewer was broken. Now, this is no longer the case, and the result is that each house is infested not merely with the emanations from the cesspool introduced through the closet, but with gases from the sewers brought up by the rain and waste-water pipes. Such a thing as a trap, even the simple S-trap, in the leaden bath and sink pipes is unknown. The utterly useless bell-trap alone is employed on the mouth of the pipe to prevent solids going down. We have tested several of these pipes, and on many occasions found a strong updraught.

In every house we have visited, where cases of typhoid had occurred, the condition of the drainage was in itself quite sufficient to account for the presence of the disease; but some houses were especially dangerous, and one or two of these we ought perhaps to describe. In the Rue Galleon, on the confines of the Batignolles quarter, we found a widow whose two adult children had just recovered from typhoid. The closet was situated immediately opposite the bedroom door of the first victim. It was absolutely dark, even in the day. There was no window, no water, no lid to the seat, and not only no trap, but not even a valve to close the pan. We dropped a pebble straight into the cesspool below. The closet had never been disinfected, nor were the dejections of the patients mixed with any antiseptic before they were thrown into this cesspool. Within a yard of this focus of infection we found the kitchen, a dark, unventilated place. The whole of this small apartment was of necessity permeated with the gases from the cesspool. Yet for this state of affairs neither the law nor custom afforded any remedy. In the Rue de Clichy, not far from this place, we discovered a house where the cesspool was dug under the ante-chamber. On inquiry, we ascertained that this cesspool had never been emptied, for the simple reason that it was dug in permeable soil and uncemented. The matter all escaped into the surrounding ground.

Among the most notorious slums should be mentioned the Cité des Kroumirs, the Cité Doré, and the Cité Jeanne d'Arc, where the latrines infect the surrounding atmosphere and are utterly devoid of any sanitary apparatus. Here cases of fever have been nursed in rooms inhabited by six and seven persons; and, for want of mortuaries, the bodies kept in these crowded hovels till the hour of burial. That the fever should manifest itself in such rookeries is not surprising. What is more striking is that in the best quarters of Paris, in houses where the most exorbitant rents are paid, there is not sufficient knowledge to secure adequate drainage. Hence many visitors, especially English and American families, have fallen victims to the reigning epidemic. According to Dr. Oscar Jennings, to whom we are indebted for much valuable information, the English visitors are more susceptible, as they for the most part are accustomed to more wholesome surroundings. Nearly all Dr. Jennings' patients have been foreigners, aged from fifteen to twenty-two years. In the Rue St. Honoré, between the Rue Royale and the Rue Castiglione, surrounded by high class hotels, peopled for the most part by English, we visited a block of houses that constituted a regular centre of infection, and where four cases had been attended by one practitioner. On every landing there was a closet without any window, and ventilating by means of a little aperture in the top of the door on to the staircase. There was no water at all in these closets, they were very dirty, and there was nothing to prevent the sewer gas coming up. The dejections of the typhoid patients in this house had not been disinfected before they were thrown into these closets. Again, in the Boulevard Haussmann we inspected a high class boarding house, frequented by wealthy Americans, where there had been four cases of typhoid fever. Here the closets drained into a *tinnette filtre*, had no traps, and pans containing only an inch of water. The *tinnette* placed in the cellar produced a very foul odour. Into the kitchen sewer gas could easily obtain admission by means of the sink pipe, which was unpleasantly near the range and table, where some succulent creams and whipped eggs were in course of preparation. From the Boulevard Haussmann we proceeded to the Avenue Carnot, and inspected a handsome apartment close to the Arc de Triomphe. Everything seemed, for a French house, in very good order, but there was a strong up-draught in the closet pipe; no trap and no air-tight valve. The only tenant of this apartment, a young man, was convalescent from typhoid. In the Rue Monceau we examined a girl's school kept by the Sisters of St. Vincent de Paul, where there had been some cases of typhoid fever. The Lady Superioress showed the greatest anxiety to observe all rules of hygiene, and had caused her pupils when ill to be at once removed to the Hôpital Beaujeon, but no one had told her to disinfect the dejections; and the latrines in this establishment had neither traps, valves, nor water. They were characteristically dirty. There was also a closet without a valve opposite the dormitory door.

In the Rue Miromesnil, we visited a splendid block of houses newly constructed, and where the cheapest apartments were rented at £240 per annum. Here a man-servant, who slept in the same apartment with his master, had been removed suffering from enteric fever, and the porter was actually ill from some as yet undefined gastric disturbance.

At the base of this house we found a servant's closet with the foul *trou de turc*—that is, no seat, but a small hole in the floor communicating directly with the cesspool, no water, and of course no trap. In the master's apartments the closets had no water laid on; and in the unlet apartments the closets had been fouled by the workmen and never cleansed. Indeed, it would have been difficult to clean them without borrowing some utensil to bring water in from the kitchen. From this high-class dwelling we went to visit some small and cheap tenements in the Faubourg St. Honoré, close to the Church of St. Philippe du Roule. Here there had been cases of typhoid and of small-pox. On each landing there were four apartments and two closets. The latter had no trap, no valve, no water, and ventilated upon the staircase. A little hole four inches square, protected by an iron grate clogged with cobwebs, opened into the yard, but could scarce have provided fresh air. The closets were very foul, the walls bespattered with dried fæcal matter, the seats unapproachable, and the space extremely restricted. It is impossible to conceive how anyone with any sense of cleanliness could frequent such dark and unwholesome places. In several other houses we found the closet windows opening into a small yard, three to four metres square, and facing, or at angles, with the kitchen windows. Both being kept open, the closet air was naturally attracted by the fire into the kitchen. This was notably the case in the Rue d'Amsterdam, in a house where typhoid fever had manifested itself. The yard we measured was two by three yards square, and surrounded by walls six storeys high. At the base of this shaft was an exceptionally foul closet and cesspool. On each of the six floors a closet window opened within a couple of yards from the kitchen window, and outside these kitchen windows hung several meat safes, protecting their contents from the sewer gas only by their surrounding wire gauze. When we consider that it is in no wise the practice to disinfect the dejections from typhoid patients living in such houses as these, it is not surprising that they should become permanent sources of infection.

The fact is that Paris has become such a centre for typhoid fever that the bulk of its inhabitants are, to a great extent, inoculated by its germs, otherwise the consequences of bad hygiene would be much more serious. As Dr. Bouchardat remarked in his address to the Academy of Medicine: "We can acclimatise ourselves to the ferment of typhoid fever. We can suffer from some slight form of this malady which passes unnoticed, or by dint of successive absorption of the morbid ferment, that may be compared to preventive inoculations, acquire a pathological cuirass, and in either case immunity, or at least relative, though not absolute, immunity becomes the law." Hence it is that foreigners rather than Parisians supply the greater proportion of victims to these epidemics of typhoid fever, a result which assuredly is most discreditable to the French sanitary authorities. Nor is typhoid the only danger. The other zymotic diseases, and notably diphtheria, have been increasing, the deaths from the latter having doubled within the last twelve years.

With a view to improving the drainage of Paris, a committee has been appointed to visit several capitals of Europe, and notably London. There is much talk of abolishing all the cesspools and draining direct into the sewers; of adopting, in a word, the English system. But for its successful application, English cleanliness and English sanitary knowledge are absolutely necessary, and these fundamental qualities are lamentably wanting in the French capital. To place all the houses in communication with the sewers without any knowledge as to trapping and ventilating drain-pipes would increase the danger, particularly as there is not sufficient water, and the Paris sewers are in many instances not self-cleansing or effectively built. As a counter-proposal, the adoption of M. Berlier's system of pneumatic drainage is advocated by many warm partisans, notably Professor Brouardel and the majority of the Paris papers. On the abstract merits of this system we would not pronounce a definitive opinion, but it is certainly infinitely preferable to the English system badly applied. Its great advantage for Paris lies in the fact that its effective working would not depend either on the municipal authorities or on the care and intelligence of the inhabitants. The apparatus works automatically and withdraws by pneumatic suction or vacuum both vegetable and animal waste from the houses. It has now been in successful operation at the barracks of the Pépinière for many months; and, though 1000 soldiers are quartered here, not one case of typhoid fever has occurred among them. These are the only barracks in Paris which have escaped the ravages of the present epidemic. On the other hand, at the Gros Caillou, at the Château d'Eau, the barracks have been the principal centres of disease, and the prevalence of typhoid fever among French soldiers has become notorious. Dr. Rochard describes one epidemic which attacked 1000 soldiers out of 4000 in the space of two months, killing 25 per cent. of the sick. To have saved a barrack in Paris, at such a season, from the fever is no slight testimony to the sanitary properties of the pneumatic system of drainage. By its introduction, houses would be utterly disconnected from the sewers, which themselves would be purified by the fact that they would only receive rain-water. Cesspools, at the same time, would be abolished. Slops and house-drains would all be conducted to the powerful iron receivers placed in the cellars or the old and cleansed cesspools. Here a strong suction, produced by steam power, draws several miles out of Paris all the injurious substances. Instead of a pressure of sewer gas forcing its way into the houses, the pressure or suction is from the houses towards the exhaust cylinders. The manure of Paris would be preserved and available for agricultural purposes; but, above all, the system would not require, in its application, the display of any intelligence or sanitary knowledge on the part of the population. This is our reason for bringing it so prominently forward. Our knowledge of sanitary matters in England is by no means complete, but if we are to await till the education of French opinion is formed on this subject, the present generation of adult English men and women must abandon all hope of being able to dwell in Paris with any sense of security. No person of a likely age and susceptible disposition can now visit the gay and beautiful city, the holiday resort of the world, the centre of civilisation, as Victor Hugo would have us believe, without incurring a grave danger of contracting an acute form of zymotic disease.

THE INQUEST ON DR. EDWARDES.

AN inquiry into the circumstances attending the death, by his own hand, of Dr. William Whitfield Edwardes of Hounslow, was opened on Saturday last by Dr. Diplock, Coroner for West Middlesex, at the residence of the deceased. Mr. George Lewis, on behalf of the bereaved relatives, and Mr. E. Gladstone, on behalf of Dr. Michael Whitmarsh, partner of the late Dr. Edwardes, watched the case. After the body had been viewed, Dr. Whitmarsh was called as the first witness. He stated the circumstances of his last interview with his late partner—an interview which, owing to a charge, afterwards withdrawn, made by a female patient against the professional honour of Dr. Edwardes, and a wish expressed by Dr. Whitmarsh for the retirement of Dr. Edwardes from the practice, was of a painful character. Some two hours after Dr. Edwardes had left for his own home, a message was received by Dr. Whitmarsh requesting his presence, as Dr. Edwardes desired to see him. Not deeming it necessary to attend, Dr. Whitmarsh, at eight o'clock, sent to know if Dr. Edwardes had, in accordance with arrangements made the previous night, gone to London. He then learnt that his partner was dead. The next witness was Mrs. Ada Edwardes, widow of the deceased. According to her evidence, her husband had been mentally depressed for some time past, having been "deceived to a shocking extent" regarding the value of his share in the practice. When he returned from Dr. Whitmarsh's, on the evening of his death, he told her that it was the fact of Dr. Whitmarsh stating his intention of standing up against him instead of supporting him that caused him to break down. The witness then described the discovery of the body, the sending for medical assistance, and the finding of a bottle which had contained prussic acid on a table near the deceased. A letter had been found, written by her late husband to the *Middlesex Mercury* just before his death, which, after some discussion on the part of the coroner, legal attendants, and the jury, was read. It contained a solemnly emphatic denial of the charge brought against him, which the writer, so soon about to stand before his Maker, attributed to the "morbid imagination of a licentious-minded, hysterical woman." A prayer for a blessing on his wife, his little boys, and his mother, concluded the document. The

written retraction of the charge above alluded to, which had been signed in the presence of witnesses, was then asked for; but after taking the evidence of Dr. Ball, who attributed death to prussic acid, and spoke of the high respect in which the deceased was held in the neighbourhood, it was decided to adjourn the inquiry until Thursday. On that day the written retraction was produced; it was complete, and accompanied with an expression of regret on the part of those who had made the false charge. No material addition to the evidence already adduced had been forthcoming at the time of our going to press.

On Monday the funeral took place at Heston Cemetery, and the opportunity was taken for a general display of sympathy with the bereaved relatives. The officers of the 8th Middlesex Rifles, in which corps Dr. Edwardes was a lieutenant, accorded military honours to the deceased; many of the shops were closed, and the route to the tomb was lined with sympathising spectators; wreaths and crosses were placed on the coffin and three volleys fired over the grave. In the evening a mob, against which the police were quite powerless, assembled, and by means of stones and other missiles destroyed every window in Dr. Whitmarsh's house. These scenes of riot were continued during Tuesday and Wednesday, although not to such an excess, the local police having been reinforced by a large body of mounted and other constables who kept unceasing and vigilant watch over the residence; it is stated that at one time more than forty constables were located in the house to ensure its protection. The cause of this outburst of popular feeling is no doubt due to the great popularity of Dr. Edwardes. Although only resident in the district for about twelve months he had gained the esteem of almost all with whom he was brought into contact, his devotion to his profession and attention to the poor being remarkable. He was a hardworking and distinguished student of St. Mary's Hospital, and before leaving that institution filled the post of principal obstetric physician for the usual period of six months.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Rochdale.—According to the census of 1881 Rochdale had a population of 68,865; the birth-rate for that year has been 30·2, and the death-rate 19·9 per 1000; the latter being somewhat less than the urban population for England and Wales. The infantile deaths under one year of age were at the rate of 13·8 per cent. of the births, a fact to be in the main attributed to that absence of infantile diarrhœa for which Rochdale has long been noted, whilst many surrounding and very similarly circumstanced towns have suffered severely. The only infectious disease which was epidemic was small-pox. As many as 496 cases were reported to Dr. J. Henry, the medical officer of health, and fifty-one fatal cases were registered. The epidemic continued over many months, and we have recently referred to the inquiry made by Dr. Thorne Thorne as to a special distribution of the disease in the neighbourhood of the old workhouse, which had been transferred into a temporary hospital. Mr. Alderman Taylor, so long connected with the health department of the corporation, issues a separate report as to the night soil depôt. The number of so called Rochdale pails in use at the end of 1881 was 10,182, and the quantity of artificial manure manufactured was 552 tons. Fortunately also, the demand for this manure equals the supply; the best possible test of its value for agricultural purposes. Mr. Taylor foretells a further improvement in connexion with this manufacture owing to a very clever invention of the manager, Mr. Haresceugh, by which increased efficiency and economy will be ensured; and he further suggests that the smaller mortality of Rochdale, as compared with other Lancashire manufacturing towns, is, at least in part, to be attributed to the speedy and frequent removal of all excrementitious matters from the vicinity of houses. This suggestion is of special importance in connexion with the immunity of Rochdale from prevalences of infantile diarrhœa.

Salford.—Not only was the death-rate for Salford in 1881 less than the average of that during many preceding years, but the rate of decrease was in excess of that which obtained in the neighbouring large towns. Dr. Tatham, however, cautions the corporation against a too hasty conclusion that this result is all to be attributed to improved sanitary circumstances, and he proceeds at once to deal in detail with some of the conditions which still operate injuriously upon health. Amongst these are the impurity of the atmosphere by reason of the smoke nuisance, which is the main factor in producing in Salford a death-rate from lung disease averaging 598 per 100,000, as opposed to an average of 334 in Mid-Cheshire. Next comes the brick-burning nuisance, as to which the by-laws are often violated. The faulty system of excrement disposal and the practice of heaping up and storing midden-refuse come in, as in previous years, for a good share of condemnation. The tip nuisance is, however, declared to be at an end, the Sanitary Committee having determined to carbonise all such refuse in a destructor now in course of erection. The typhus outbreak, which commenced in 1881, is reported to have ceased, small-pox has been all but absent, and though scarlet fever has been epidemic in several localities, yet its early suppression was materially facilitated by the system of notification which the school authorities voluntarily carry out. The isolation of the infectious fevers has been effected both at the Wilton Hospital, which was provided by the corporation some years ago, and at Monsal Hospital, with which Salford has made special arrangements, and during 1881 the number of persons isolated was 171. The population of Salford in the middle of 1881 was 177,755, the general mortality was at the rate of 22·5 per 1000, and that of infants under one year as high as 16·3 per cent. of the registered births. The description of the sanitary work carried out during the year shows that a vigilant eye is maintained over all that relates to the health of the district. Amongst the more urgent recommendations made by Dr. Tatham is the provision of an efficient disinfecting stove. Originally a Nelson's stove was provided, but in Salford, as in other places, it has been unsatisfactory in its working. Indeed, so many articles have been destroyed in it that its use for clothing or bedding of any value has had to be abandoned.

Cork.—During the four weeks ending December 2nd 166 births took place, being equal to 27·5 per 1000. The deaths registered amounted to 134, including 18 dying in the workhouse, and therefore outside the borough. The annual death-rate per 1000 inhabitants was 22·4, but, deducting those who died in the workhouse, the urban death-rate will be 19·2.

A special meeting of the Dudley board of guardians is to be held to consider the question of the overcrowding of the imbeciles at their workhouse. Mr. Longe, the Government inspector, states that the beds of the patients touch each other in the wards, in violation of all the rules of health and decency.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 4921 births and 4036 deaths were registered during the week ending the 30th ult. The annual death-rate in these towns, which had been equal to 23·4, 26·9, and 27·6 per 1000 in the three preceding weeks, declined again last week to 24·9. The lowest death-rates in these towns last week were 16·9 in Portsmouth, 17·1 in Brighton, and 19·8 in Leicester. The rates in the other towns ranged upwards to 29·9 in Manchester, 33·1 in Preston, 35·9 in Liverpool, and 37·7 in Sunderland. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 410, and fewer than in any previous week of the year; 92 resulted from scarlet fever, 90 from whooping-cough, 88 from measles, 74 from "fever" (principally enteric), 43 from diarrhœa, 17 from diphtheria, and 6 from small-pox. The lowest death-rates from these zymotic diseases occurred in Brighton, Oldham, and Bradford; and the highest in Liverpool and Sunderland. Scarlet fever caused the greatest fatality in Sunderland and Nottingham; whooping-cough in Plymouth and Preston; measles in Birkenhead, Cardiff, and Sunderland; and "fever" in Newcastle-upon-Tyne, Derby, Liverpool, and Sunderland. The 17 deaths from diphtheria in the twenty-eight towns included 12 in London and 3 in Manchester. Small-pox caused 2 deaths both in London and Newcastle-upon-Tyne, and 1 both in Nottingham and

Sunderland. The number of small-pox patients in the metropolitan asylum hospitals, which had been 75 and 73 on the two preceding Saturdays, had risen to 82 at the end of last week; 12 new cases of small-pox were admitted to these hospitals during the week, against 22 and 13 in the two previous weeks. The Highgate Small-pox Hospital contained 9 patients on Saturday last, 2 new cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 637 and 633 in the two previous weeks, declined to 461 last week under the influence of the exceptionally mild weather. The causes of 140, or 3·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Brighton, Leicester, Norwich, Plymouth, Nottingham, Derby, and Cardiff. The largest proportions of uncertified deaths occurred in Huddersfield, Leeds, Salford, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 32·1 and 30·8 per 1000 in the two preceding weeks, further fell to 30·1 in the week ending the 30th ult.; this rate, however, exceeded by no less than 5·9 the mean rate last week in the twenty-eight English towns. The deaths referred to the principal zymotic diseases in these Scotch towns, which had been 116 and 119 in the two previous weeks, were 112 last week, and equal to an annual rate of 4·8 per 1000, which was more than double the rate from the same diseases in the large English towns. The highest zymotic rates in the Scotch towns last week were 6·0 in Glasgow, 6·6 in Leith, 6·8 in Dundee, and 8·6 in Perth. The fatal cases of whooping-cough in the eight towns, which had been 37 and 43 in the two previous weeks, declined to 35 last week, of which 20 occurred in Glasgow, and 9 in Dundee. The deaths referred to "fever," which had been 19, 11, and 10 in the three preceding weeks, rose to 21 last week, of which 7 occurred in Glasgow and 3 each in Edinburgh, Leith, and Aberdeen. Fever fatality in the Scotch towns showed a marked excess compared with that which prevailed in the English towns. The 16 fatal cases of scarlet fever (including 11 in Glasgow) were fewer by 7 than those in the previous week; and the 9 deaths from measles, of which 8 occurred in Glasgow, also showed a decline from recent weekly numbers. The deaths referred to diphtheria also declined to 15, from 19 and 17 in the two previous weeks; 8 were returned in Glasgow, 3 in Dundee, and 2 in Paisley. The deaths attributed to acute diseases of the lungs in the eight towns, which had been 231 and 228 in the two preceding weeks, further declined to 199 last week, but exceeded the number from these diseases in the corresponding week of last year by 55. The causes of 119, or nearly 17 per cent., of the deaths registered in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The annual rate of mortality in Dublin, which had been equal to 24·9, 33·6, and 38·1 per 1000 in the three preceding weeks, declined again to 32·1 in the last week of December. During the thirteen weeks of last quarter, the death-rate in the city averaged 26·7 per 1000, against 21·8 in London and 20·5 in Edinburgh. The 214 deaths in Dublin last week showed a decline of 40 from the high number returned in the previous week, and included 22 which were referred to the principal zymotic diseases, against 20 and 19 in the two previous weeks. They were equal to an annual rate of 3·3 per 1000, against 2·3 in London and 2·0 in Edinburgh. These 22 deaths included 10 which were referred to "fever," 7 to whooping-cough, and 5 to diarrhœa. The fatal cases of "fever" (including typhus, enteric, and simple) exceeded the number returned in any previous week of the year, and raised the number recorded in the last quarter of the year to 74. The fatal cases of whooping-cough, which had been 9 and 6 in the two previous weeks, were 7 last week. The deaths attributed to diarrhœa corresponded with the number in the previous week. The deaths of infants showed a marked decline last week, whereas those of elderly persons again showed a marked excess.

DR. MACNAUGHTON JONES has, in consequence of new professional engagements, resigned his post as physician to the Cork Fever Hospital, and House of Recovery.

THE SERVICES.

MILITIA MEDICAL DEPARTMENT. — Surgeon-Major William Day Murphy, 4th Brigade, South Irish Division, Royal Artillery, resigns his commission; also is permitted to retain his rank, and to wear the prescribed uniform on his retirement.

ADMIRALTY. — The following appointments have been made:—Surgeon Samuel C. Browne, to the *Cockchafer;* Surgeon George W. F. Armstrong, to the *Indus*, vice Browne; Surgeon Joseph Anderson, to the *Stork;* Surgeon Albert C. Queely, to the *Excellent;* Staff Surgeon Edward E. Mahon, to the *Sapphire.*

Correspondence.

"Audi alteram partem."

MEDICAL LEGISLATION.

To the Editor of THE LANCET.

SIR,—I must beg that you will permit me to point out the serious errors into which you have fallen in the representation of my statements and views in your issue of to-day. You say—"But the most astonishing part of Dr. Struthers' views is his entire complacency with the examinations of the Scotch corporations." On the contrary, in my evidence before the Medical Acts Commission (October 20th, 1881, No. 5832) I said: "I think the corporations of Edinburgh have erred in not stopping the half qualifications; they still go on holding their separate examinations. That, I maintain, is the weak point, and it is one which I must admit has brought some discredit lately upon Scotland. It is the separate examinations of the Edinburgh and Glasgow corporations that are bringing discredit upon us. Perhaps 'discredit' is too strong, but these half qualifications continuing both in London and in Edinburgh are the source of all this agitation. If the two leading corporations in London, Edinburgh, and Dublin, would only unite and stop their separate examinations for all candidates who are not already completely qualified, you would have an end of all these criticisms, and you would have a perfect examination, I believe, in each metropolis." And again, in No. 5874, I said "A man may pass the primary examination of the Apothecaries' Society here, the anatomy of which I am quite sure must be very poor anatomy, and then go up to the Edinburgh corporations, and that examination of the Apothecaries' Society is accepted by the Edinburgh corporations. ..... The result of that (though I do not say it is very common) is, that when a man passes the Apothecaries' Society here and goes up with their primary certificate, he virtually skips his anatomy and physiology. I say it is wrong in these corporations to do so; and they have brought Scotland, to a certain extent, into discredit by that. The London College of Physicians does the same, but in a better way; it accepts the examination in anatomy of any surgical body. That is safe; but if we had a conjoint examination by the corporations in each metropolis that would be all right; they could accept one another's professional examination with entire security." Then, in my letter, which your article professes to criticise, I say: "If the jealousies or interests of corporations continue to prevent their combining to form a joint examination in each metropolis, they must be made to do so by the strong hand of the law." I fear that by my friends of the corporations these views may be regarded as savouring more of the too candid friend than of the complacency with their examinations with which you credit me.

The two Royal Colleges of London are at last, one is glad to see, in conference on such a joint scheme, and, having dropped the Apothecaries and the show of including the universities, there should be no difficulty in forming a simple and efficient joint examination. The Scotch universities, though amid much abuse at the time, have now the acknowledged merit of having successfully opposed the monstrous and iniquitous scheme of 1877–8, then known as the English Conjoint Scheme; but their sympathies, I should think, are likely to be with such a joint scheme as that which appears to be now in contemplation.

To those who know the amount of time that Dr. Gairdner and your humble servant have given to advocating and introducing reforms in medical education and examination it must be rather surprising to see us held up together virtually as opponents of progress. Dr. Gairdner is very able to speak for himself. For myself, I can say that there is much in the Report of the Medical Acts Commission which I would be glad to see passed into law. It is all very well to phrase about reform on the lines of the Report of the Royal Commission; but on turning to the document itself we find that to a Report twelve pages in length, signed by eleven Commissioners, is appended a series of dissents fifteen pages in length, signed by six (that is a majority) of the same Commissioners, and that three, and these not the least influential, enter a vigorous protest against the very principle of slumping universities and corporations together in one general conjoint board. The tail, in fact, of this *quot homines tot sententiæ* Report is not only greater than the body, but also contains the head.

There need be no difficulty in framing a Bill which will enact what is wanting for the public safety, which will remove the grievance of the English student in having to pass before two separate bodies, and which will, at the same time, inflict no grievance, either of examination or expense, on the no less important body of students of the Scotch universities, and which will also conserve the status and interests of the worthy among the great corporations of the profession. No Bill which makes the opportunity of accomplishing the more public object an excuse for one party, or one kind of institution, or one division of the kingdom gaining an advantage over the other, is likely to pass into law. The movers in the London corporations and English universities, and the organisers of deputations, may rest assured that it will be in vain to inspire a Bill which will injure Scottish institutions, either openly or covertly, by giving the power to do so to a Council containing an absolute majority of English votes. They may rely on it that the Scottish universities will on no account consent to the imposition on their students either of an additional examination, or of additional expense on account of divisional board examiners. But there is evidence from the Scotch universities before the Commission to the effect that, on these conditions, they are willing to receive as many outside examiners as the Crown, or the Medical Council, or the proposed divisional board may wish to send. Speaking for myself, I may say that it would be not only unobjectionable, but an improvement, were our co-examiners appointed by some outside authority, and also if they were, as far as possible, common to the several universities. And the same of the English universities.

You imply a challenge of my opinion as to the teaching of anatomy and physiology in London and in Scotland. The London point of view of course is that whatever is in London is necessarily the best. On that subject, I beg leave, in reply, to refer you to my paper read at the International Medical Congress last year in London, "Comparison of British and Continental Schools of Anatomy." That paper was called forth by the attacks which had been made in the London journals on the Scottish universities. Teachers of anatomy in London, from Scotland, and from various European universities were present. The only teacher of anatomy in London who took part in the debate, one of the best known and most respected of all your teachers of anatomy, concurred in the unanimous expression of opinion of the superiority of the Scottish over the London system, and that in far stronger terms than I had employed.

I am, Sir, your obedient servant,

JOHN STRUTHERS.

Aberdeen University, December 23rd, 1882.

*** We are quite willing to believe that Prof. Struthers is sincere in his desire to accomplish educational reform. From his character and history he ought to be at the front of those who want to simplify and improve the minimum examinations, and to take precautions that the universities of Scotland will never allow themselves to be led into temptation to compete with mere licensing boards. There are two or three things in Professor Struthers' views which still surprise us. He still seems to us to make very light of the discredit which has come on the examinations of the Scotch corporations. He thinks "discredit" is perhaps too strong a word. We think it too weak a word. Next, he persists in saying that by compelling conjoint examinations and stopping the granting half qualifications, all adverse criticism would be ended, omitting to notice the fact that adverse testimony has had reference in most instances to the double qualifications granted by the Scotch corporations. The next thing is his failure to see the interest that the Scotch universities and their graduates have in supporting a reform which tests even their examinations. He must know that there are men of the greatest ability who speak slightingly even of the existing examinations in Scottish universities. If he doubts this, let him look at Mr. Simon's evidence before the Select Committee of the House of Commons (Q. 612), and at some of his questions in the examination of witnesses before the Royal Commission. Surely, in view of this fact, it is unreasonable to magnify the inconvenience to university graduates of having to pass the final examination of the conjoint board. The unreasonableness becomes more apparent when it is remembered that Professor Struthers said, before the Select Committee, that he and the Medical Faculty of his university were willing to "make a concession," that this concession is the very thing proposed by the Commissioners, and yet that Professor Struthers says the Scottish universities will never assent to it. We cannot see that Professor Struthers is consistent with himself here, and we are quite sure that it is not the interests of Scottish graduates for Scotch professors to oppose any reasonable scheme for assuring the public that Scotch graduation is a real distinction, and does mean something more than passing a minimum examination.—ED. L.

"PICRIC ACID AND SUGAR TESTING."

To the Editor of THE LANCET.

SIR,—Absence from London at Christmas prevented my seeing your issue of Dec. 23rd till last Wednesday. I then found that further letters had reached you from Dr. Johnson and his son, and that another rejoinder was called for from me. This I shall be happy to supply.

The main point in the controversy seems to have narrowed itself now to the question of the production or non-production of an alkaline sulphide on boiling unoxidised sulphur organic products with a caustic alkali. Dr. Johnson asks me to give consideration to his son's facts and arguments relating to the influence of the presence of lead, or some other metal, in determining whether a sulphide is found or not. He states that his son "demonstrates and explains the fact that while a lead sulphide is formed by boiling albuminous urine with liquor potassæ *mixed with lead*, no alkaline sulphide is formed when the same urine is boiled with *pure liquor potassæ*." The son says: "Now, it is stated and accepted as a fact in the chemical text-books, and is to be found in so many words in Watts' Dictionary, that albumen gives rise to an alkaline sulphide when boiled with solution of caustic alkali. It was therefore very surprising to me to find that dried ovalbumen, a specimen of which happened to be handy, produced no trace of sulphide, even after boiling for half an hour with a strong solution of potash; the solution thus obtained gave no dark colour or precipitate with a solution of acetate of lead." Further on, Mr. Stillingfleet Johnson says: "If the lead solution was added to the albumen and potash *before boiling*, and heat afterwards applied, an abundance of lead sulphide was produced, and here is the clue to the mystery. The text-books direct to add the lead before boiling the albumen with potash. The fact is that a sulphide can be produced only by boiling an alkaline solution of albumen (made in the cold) with a metallic solution, such as one of lead or copper."

Here we have a definite representation of the ground upon which Dr. Johnson and his son's critical remarks are based, and it is inconceivable to me how such fallacious results as have been described have been obtained. The refutation need not rest upon an assertion of mine, for anyone can satisfy himself with the greatest ease that the text books are right and Mr. Stillingfleet Johnson wrong. I will not run away from the substance, ovalbumen, which has been specially named,

but take this for the purpose of illustration. Now, let two pieces of coagulated white of egg of about the size of peas be placed in a couple of test-tubes, and about a drachm and a half of liquor potassæ uncontaminated with lead be added to each. In the one tube let fall a drop of acetate of lead solution, and boil. The piece of albumen becomes blackened on the surface, but ultimately dissolves with the production of a black coloured liquid. Next boil the contents of the other tube to which no plumbic acetate has as yet been added, and continue the boiling till the piece of albumen is thoroughly dissolved. Then drop in the plumbic acetate solution, and from the dark colour which is instantly produced no doubt can be entertained regarding the formation of sulphide of lead. By using a stronger solution of potash than liquor potassæ, and by boiling for a period of full five minutes, the effect is increased, but in either case evidence is given of the production of sulphide of lead; and for this production of sulphide of lead it does not signify whether the lead solution be added before or after the boiling.

Dr. Johnson, in his last letter, asks me for proof other than a reference to well-known text books. I have supplied it, and upon evidence that must carry conviction to any observer.

The point must not be lost sight of that whatever might have been the issue of this discussion about the formation of a sulphide, the fact stands that healthy urine gives a certain degree of reaction with the picric acid and potash test, and this, independently of the trace of sugar which healthy urine contains, for it is obtainable after boiling the urine with caustic potash, a treatment that leads to the destruction of sugar. Practically, this is the point of importance as regards the question of value of the test, and it was this question of value which mainly induced me, in the first instance, to trouble you with a communication upon the subject, for I strongly felt then, and I equally strongly feel now, that its introduction into use for the recognition of diabetes would be attended with such a liability to the occurrence of error as to seriously endanger the interests of medical practitioners and patients.

Another consideration that led me to write was from seeing that Dr. Johnson was altogether wrong in the notion he formed about the mode of action of the test. He described the picric acid as intensifying the reaction between caustic potash and sugar. On reference to the literature of the subject, I found, as I stated in my first letter, that picric acid is itself susceptible of reduction to a coloured product—picramic acid, and although I had not then seen any mention made about sugar in relation to it, I gave it as my opinion that "the effect of grape sugar is to act as a reducing agent upon the picric acid instead of the picric acid intensifying the action of potash upon grape sugar." I have since found that this opinion is not only supported by what has been published elsewhere, but that picric acid and potash have been proposed as far back as 1865 as a test for sugar. In the first supplement to Watts' Dictionary of Chemistry grape sugar is mentioned amongst the reducing agents of picric acid in the presence of potash, and reference is made to the writings of Braun in the *Zeitschrift für Chemie* for 1865. Braun here says that for the practical chemist the reaction of grape sugar in alkaline solutions on picric acid gives a splendid test for glucose. He refers to the best proportions to use, and how to apply the test, and states that if the sugar solution is in a concentrated condition an intense blood colour is produced, and if dilute, a deep red. From diabetic urine he has always obtained a deep red colour. Fruit sugar and milk sugar, he further says, yield the same reaction, but cane sugar and mannite do not.

We are promised by Dr. Johnson a description of a method for adapting the test to quantitative analysis. Allow me to assure him that if he brings out anything which is reliable and useful to the medical practitioner, it will meet with no obstruction from me. Medical practitioners will then have two quantitative tests to choose from, for I have long been giving attention to bringing out the "ammoniated cupric test" in a form to be easy of application for clinical use, and I have succeeded in getting it into the pellet shape, and will give you information about it a little later on. The ferrocyanic test pellets for albumen, which I referred to in your columns when Dr. Johnson started the discussion about picric acid as a test for albumen, now promise also to be very shortly ready for introduction to the notice of the profession.

I am, Sir, your obedient servant,

Grosvenor-street, Jan. 2nd, 1883. F. W. PAVY.

"LARGE ASYLUMS FOR THE INSANE."

To the Editor of THE LANCET.

SIR,—I entirely concur with Dr. Rayner in his condemnation of monster asylums for the insane contained in your last number, and I think he is rendering great service in drawing attention to this increasing evil. The only defence that could be made for them was on the score of economy. Dr. Rayner conclusively proves by his figures that they are not economical. Therefore the sole reason for building them disappears. The Commissioners in Lunacy have always condemned them, and considering the great amelioration in the condition and treatment of the insane in county and borough asylums since they have been inspected by the Commissioners—an improvement that I for one fear might easily be lost were the supervision of the Commissioners to be removed or lessened. I think their opinion on this point ought not to have been set aside by the supreme authority in the way it has been.

Dr. Rayner's idea I gather is that hospitals for acute and recent cases should be built containing from 450 to 600 beds, and that the chronic insane, the demented, the imbeciles, and the idiots should be massed in larger and cheaper asylums. I cannot say I quite agree with him in this plan. It is a confession of importance I should be slow to adopt. It means that whilst the recent cases are to receive every attention that science can prescribe, the chronics, on the contrary, are to be given up as hopelessly incurable, and the profession is to confess that nothing can be done in the way of medical treatment for them. I cannot quite subscribe to this. Every asylum physician must confess, I think, that now and then he is startled by the recovery of a chronic and apparently hopeless case, and if we are ever to see the day when a yet greater number of such cases are cured it will not be by giving up the attempt to treat them.

There are other reasons against Dr. Rayner's plan which I can adduce from personal experience in this asylum. For the last twelve years I have been engaged in one long fight against increasing numbers, and by the discharge of large numbers of chronic and harmless cases to the workhouses and to the care of their friends, and by boarding-out, I have, so far, been able to keep the Sussex Asylum within reasonable limits as to numbers—e.g., last year, out of a population of 850, 150 were discharged, of whom 70 were of the chronic class. But what is the result of this policy? It is true I have hitherto saved the ratepayers from the expense of building a second asylum; but on the other hand, the present asylum is becoming full of violent, homicidal, suicidal, and destructive patients, and as the staff has had to be considerably augmented in consequence, and the medical extras (the diet and the medicines) increased, the maintenance rate has risen in proportion.

I should like to ask Dr. Rayner whether he has quite realised what an asylum of 600 beds full of recent cases of insanity would be like. The cost of the original construction would be much greater than that of the present asylums. The staff would have to be a very large and costly one. The maintenance rate would be very high, owing to the better diet, the larger number of medical extras necessary, and to the largely increased amount of destruction, and wear and tear. But setting aside the question of cost as, after all, only a secondary one, it is with me a very debatable point whether the collection of such a large number of acute cases under one roof would be advantageous to the patients themselves. I am inclined to think the contrary. A large leaven of quiet and orderly patients cannot fail to have a beneficial effect on the more turbulent cases, whereas excitement begets excitement, and one noisy patient will often upset another who is inclined that way.

What then is my remedy? I agree, as before stated, with Dr. Rayner that large asylums, whether on the score of efficiency or economy, are to be avoided, but I go no further with him in his scheme. I would make it a law of the land that no asylum is to contain more than 600 beds, and I would suggest that every union having 600 or more pauper lunatics on its rates should be compelled to build an asylum of its own, and that those having fewer lunatics should have power to combine with neighbouring unions to build asylums. The result of this would be that the populous Metropolitan and Lancashire unions and towns generally would each have their own asylums, and the agricultural

unions would combine each in their own counties to build for themselves, the whole, as now, being supervised by the Commissioners in Lunacy.

Thus Dr. Rayner's objection to large asylums would be met, and my objections to Dr. Rayner's scheme would be obviated. Each asylum would contain a mixture of all classes of the insane, and, being of a manageable size, each patient would receive like treatment, care and attention; and the costs both of construction and maintenance, as shown by Dr. Rayner's interesting figures, would be lessened throughout England. Last, though not least, the pauper insane would be near, and supervised by, their legal guardians, and close to their relatives and friends, instead of, as often now occurs, many miles away.

I am, Sir, your obedient servant,

S. W. D. WILLIAMS, M.D.,
Medical Superintendent.

Sussex County Asylum, Haywards Heath, Jan. 1st, 1883.

"THE DETECTION OF THE TUBERCLE BACILLUS."

To the Editor of THE LANCET.

SIR,—In THE LANCET of Dec. 30th last, Dr. Heneage Gibbes says that I showed no specimens of the bacillus of tubercle at the Worcester meeting of the British Medical Association. He makes this statement after quoting, and correctly quoting, a remark of mine in which I referred to the specimens I exhibited on that occasion. Dr. Gibbes says—"By whom were they (the specimens) seen? When I left the room everything was over, and there were only a few people there, and from the time the Section opened in the morning until I went away, Dr. Heron had not shown a single specimen under the microscope."

From the letters which I enclose for publication it is clear that Dr. Gibbes' deliberate and sweeping assertion is not founded upon fact. To discuss any question with one whose apprehension of the nature of a fact is so curiously distorted as is Dr. Gibbes' would, of course, be merely to waste time.

In, so far as I am concerned, closing this discussion, I wish to state briefly, my reasons for entering upon it. Many men engaged in this line of research in this country feel very grateful to Dr. Ehrlich for the invaluable help given to them by the use of his process, and for the very kind way in which he freely placed the results of his labours at their disposal.

As was shown in my letter which appeared in THE LANCET of December 23rd, 1882, Dr. Heneage Gibbes has taken advantage of his opportunities, on the one hand, publicly to decry the results obtained by Ehrlich's method for the detection of the bacillus of tubercle; while, on the other hand, he belauds a process which in his letter in THE LANCET of December 30th he still calls his own.

It seemed to me that there was some need for drawing attention to the distinction which ought to exist between a method like Ehrlich's, rightly called new, and one like Dr. H. Gibbes', which is at most but a very slight modification of a process already well known.

I am, Sir, yours truly,

January 2nd, 1883. G. A. HERON.

(COPY.)

DEAR DR. HERON,—I certainly think that, in justice to you, the statement made by Dr. Heneage Gibbes, to which you have called my attention, should not be allowed to pass without contradiction. As I had invited you to attend the Worcester Meeting in order to demonstrate your specimens and their preparation, I was surprised to read that statement, which must have been made through inadvertence. You demonstrated Ehrlich's method to the meeting and showed the specimens prepared by it. The Section was much indebted to yourself and Dr. Gibbes for the trouble you both took in these demonstrations, which were attended by many members of the Association.

I am, dear Dr. Heron, yours truly,

SIDNEY COUPLAND,
Secretary to the Pathological Section of the British Medical Association (Worcester Meeting, 1882).

Weymouth-street, Jan. 1st, 1883.

(COPY.)

DEAR HERON,—In answer to your three questions with regard to your demonstration at the Worcester Meeting of the British Medical Association, I beg to state:—1. That you showed specimens of the tubercle bacillus under the microscope immediately after your demonstration. 2. That they were seen by myself. 3. That they were inspected by many other members of the Association.

Believe me to remain, yours very truly,

(Signed) FREDERICK TREVES,
Secretary to the Pathological Section at the Worcester Meeting of the British Medical Association.

Gordon-square, W.C., Jan. 2nd, 1883.

*** Two other letters, to the same effect as the above, from Dr. Theodore D. Acland and Dr. Lawrence Humphry respectively, have been received, but their publication appears to us unnecessary.—ED. L.

"DEATHS AFTER ABDOMINAL OPERATIONS FROM HEART-CLOT."

To the Editor of THE LANCET.

SIR,—With reference to the letters of Dr. Keith and Mr. Tait in THE LANCET of Dec. 30th, I wish to point out that in the figures I gave in my letter of Dec. 11th I excluded the deaths after incomplete operations in Dr. Keith's first hundred cases; had I not done so his figures would have been 331 cases, with 43 deaths and a proportionately higher mortality. Probably there were also some recoveries after incomplete operations, and Dr. Keith's percentage reaps the benefit of them. Mr. Tait, referring to my table, says, "the figures he quotes for myself are entirely wrong." I can only say in reply that they were accurately and carefully copied from Mr. Tait's own printed and published tables, and I give them, with references to their place of publication, in a note below.[1] In the first paragraph of his letter Mr. Tait says, "they should be 312 cases with twenty-six deaths, giving a mortality of 8·4 per cent." A little farther on in the same letter he says, "In the present edition of my book I give these figures as the result of my practice: 301 cases with 24 deaths, 8 per cent. mortality." If we accept the first statement as correct, Mr. Tait must have had 2 deaths in his last eleven ovariotomies. But compare either set of figures with those in his published tables, given in my foot-note, and we have the following astonishing facts. Up to August 5th, 1882, Mr. Tait had performed 226 ovariotomies with 27 deaths. Up to Dec. 11th, 1882, he claims 312 ovariotomies with only 26 deaths. It follows that between Aug. 5th and Dec. 11th one patient must have come to life again, and he must have performed 86 ovariotomies without a death in 128 days. But how does this remarkable result compare with his own statement, already alluded to, which gives 2 deaths in his last eleven cases? Mr. Tait, in a former letter, spoke of "septic intoxication" as a "new device" of mine, and now he asks me for a definition of septicæmia. I think any good surgical text-book will supply him with the latter; and if Mr. Tait will study the admirable lectures on septicæmia, delivered by Dr. Burdon Sanderson in 1877, he may learn something about heart-clot and will no longer credit me with a "new device."

With regard to the case of hysterectomy which Mr. Tait again refers to, I will only remark that London surgeons are in the habit of considering what is best for the patient at the time they are consulted, and do not recommend operations dangerous to life till the necessity is undeniable. They advise patients to wait so long as there is any reasonable hope that they may avoid a great peril, and tell them to return if the disease progresses. Many do return, and the surgeon operates. Many never return, because the disease is stationary or improving. Some fall into the hands of other surgeons, and the rule is that these surgeons respect

[1] Mr. Tait's ovariotomy tables:—1. Paper read before the Birmingham and Midland Counties Branch of the British Medical Association, Feb. 14th, 1878: 50 non-antiseptic cases, 19 deaths. 2. Paper read before the same branch, Jan. 8th, 1880: 50 "strictly Listerian" cases, 3 deaths. 3. Paper read before the same branch, Nov. 11th, 1880: "Seventy-six Consecutive Abdominal Sections;" 27 cases, 2 deaths. 4. Paper read before the Midland Medical Society, Nov. 2nd, 1881: "One Hundred and ten Consecutive Abdominal Sections; 51 cases, 2 deaths. 5. Paper read at the Worcester meeting and published in the British Medical Journal, Oct. 28th, 1882: "One Hundred Consecutive Ovariotomies without any Listerian Details." This hundred includes the last case of the 27 (No. 3) and the whole of the 51 cases (No. 4), and terminates with an operation performed on Aug. 5th, 1882. Balance, 48 cases, 1 death. Total, 226 cases with 27 deaths; mortality, 11·94 per cent.

the motives of their brethren, and do not attempt to gain credit at their expense by vainglorious boasting. Mr. Tait proves that there are exceptions to all rules, even to those founded on the first principles of professional ethics.

Dr. Keith still does not enlighten us as to his complete results since he gave up the spray, but I am glad that my letter has at last induced him to admit distinctly that he sticks to the "antiseptic principle." He carries it out with the aid of the drainage-tube, and I with the spray. Each prefers his own method, and the future, with its accumulating experience, can alone decide which is best for our patients. With regard to the drainage-tube, I have used it and shall use it again whenever I think it gives my patient one extra chance of life. My one recent experience with it was unfortunate. I have often hesitated about using it, but the after progress of the case without it has always made me rejoice that I resisted the temptation. One case, and one only, has discharged serum between the sutures and recovered; there were sound pathological grounds for the occurrence in that case, and if I meet with a similar one I shall use a tube. The hospital statistics which Dr. Keith gives are not very brilliant. He mixes up three very different operations—ovariotomy, hysterectomy, and oöphorectomy (Battey)—and he tries three different methods. The result is a total of 64 cases with 6 deaths, mortality 9·35 per cent. I take the same three operations from my hospital books, and in two years, 1881 and 1882, I have a total of 94 cases, with same number of deaths (6), mortality only 6·37 per cent. Steady Listerism certainly scores here. I should think that Dr. Keith will hardly mislead anyone by comparing the percentage mortality of one small group of his hospital cases with the percentage mortality on my whole series of ovariotomies since I began to operate. If for the two years I have named I was to add a number of such cases as nephrectomy (2), hepatotomy for hydatids, extra-uterine fœtation, &c. &c., the percentage in favour of Listerism would be still better.

I must decline to follow Dr. Keith's lead in discussing our personal differences; they cannot have any general interest for the profession, and they certainly have nothing to do with the discussion of a scientific subject.

I am, Sir, faithfully yours,

J. KNOWSLEY THORNTON.

Portman-street, W., Jan. 1st, 1883.

To the Editor of THE LANCET.

SIR,—Allow me to correct a mistake in my letter of last week. The number of operations done in the Royal Infirmary without carbolic acid spray is 40, instead of 38; making the mortality of non-spray cases 2·5 per cent., as contrasted with a mortality of 16·66 per cent. of operations done with so-called pure Listerism. I am, Sir, yours truly,

Edinburgh, Dec. 20th, 1882. T. KEITH.

To the Editor of THE LANCET.

SIR,—I have received a valuable hint from Dr. Mahomed that such cases of damaged kidney as I have described may be recognised by the sphygmograph, and I purpose making observations in this direction.

An idea has also occurred to me that the heart-clot in these cases may really be started by the use of ether as an anæsthetic. Some time ago I observed in a case of fistula between the ureter and the cervix that ether entirely suspended the secretion of the kidney as long as the patient was under its influence; and in every case of vesico-vaginal fistula upon which I have operated since, I have observed the same thing. I wish others would either confirm or correct this observation. If this action of ether be uniform, it is possible it may account for occasional deaths otherwise inexplicable. I am, Sir, yours truly,

Birmingham, Dec. 19th, 1882. LAWSON TAIT.

MEDICAL PRACTITIONERS IN NICE.

To the Editor of THE LANCET.

SIR,—In your journal of December 23rd, and in some non-medical journals, I have seen the following paragraph:—"The French doctors at Nice are, it appears, up in arms against their English and other foreign brethren established in that favoured health resort," &c. Now, as this gives a very incorrect notion of what has actually occurred, I beg leave, with your permission, to explain the real state of the case. There exists in France a Mutual Provident Medical Society, or, to give it its proper name, "Association générale de prévoyance, de protection, et de secours mutuels pour tous les Médecins de France," which has branches through the whole country, and at Nice as elsewhere. In addition to its function as a provident society, giving help to distressed members of the medical profession and their families, it occupies itself with all questions that concern the interests of the profession in their relations with the public. Accordingly, at the last general meeting four important papers were read which were published in the annual report or "Annuaire." 1. How best to reconcile the duty of the accoucheur which obliges him to give notice of the birth of a child with shielding the reputation of the mother when that child is illegitimate. 2. On the duty of the doctor with reference to testamentary dispositions in his favour. 3. On the degree in which the State should have the right to compel a doctor to take part in a medico-legal investigation. 4. On the regulations with reference to the interment of prematurely born children.

A question certainly of no less importance than these was that which occupied the attention of the Nice branch of the Society—viz., How best to deal, in the interests alike of the public and the profession (not "with their English and other foreign brethren," but) with a set of men, many of them having no qualification to practise in any country, a sort of Bedouins, a kind of medical pirates, who in defiance to the law come to a place during the season, advertise themselves as doctors, and after a stay of a few months go to exercise their trade elsewhere. Against these people the law provides a remedy as it does in England, but it has been badly administered. The Medical Provident Society considered how best to secure its more effectual exercise. The law requires that every medical practitioner shall, on settling in a place, take or send his diploma or other qualification recognised by the French law, to the office of the Prefect for verification, and have it there registered. The best means of enforcing the law was the question before the meeting, and in the resolutions they adopted, I, who am a member of the Society, and was present, most cordially concur.

I will just add that there are three ways open to anyone who desires to practise medicine in France. First. To undergo all the required examinations, and to take the degree of Doctor of Medicine, for which any one holding a bonâ fide English qualification is eligible. Second. To pass the minor examinations as *officier de santé*, which grade qualifies only for practice in one department of the country, but which authorisation, on complying with some formalities and passing a very simple additional examination, would be transferred to another department in the event of change of residence. A large number of foreign practitioners in France hold only the qualification of *officier de santé*, but they are not on that account in the least looked down on by their French colleagues. The reputation which a man brings with him from his own country is the standard by which he is judged. Third. To have the direct authorisation of the Minister of Public Instruction, which is now very rarely given, and which I owed to the fact of my having some years ago received the exceptional honour of being nominated a Foreign Correspondent of the National Academy of Medicine of Paris.

Compelled to pass my winters at Nice, I should make but a poor return for the kindness with which I have been received by my French colleagues if I did not give a true version of the incorrect statement which has been widely circulated, and which certainly could not have originated with any real member of the medical profession.

I will merely add that in what passed at the meeting there was no question of any English practitioner.

I am, Sir, yours faithfully,

Nice, December 27th, 1882. CHARLES WEST, M.D.

"THE REFUSAL OF OUT-DOOR RELIEF."

To the Editor of THE LANCET.

SIR,—For your protest against the workhouse test in last week's issue you are deserving of honour, but I think you might have gone further, and protested against the insufficiency of relief frequently given. I have had many years' experience of poor-law work, and have never been able to understand how men, estimable in every other way,

can deal with the poor as hardly as is frequently done, but consider one solution is that too much reliance is placed on relieving officers, who, from constant contact with the poor, become hardened, and who believe their only road to favour with the guardians is to cut down every shilling. I may say that the out-relief in different unions varies very much; and my opinion is, that there ought to be an authoritative scale of relief. A common amount of relief here granted to old couples is 2*s.* 6*d.*, and two loaves per week; and when 1*s.* is deducted from this for rent, it is surprising how existence is maintained. I have heard it said by ratepayers they believed the policy of the board of guardians was to kill the poor by starvation, and they believed their chief pleasure was in ordering coffins. When these things can be said, I think it shows some alteration is required. Enclosing my card, I am, Sir, yours faithfully,

December 20th, 1882. HUMANITAS.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

BY the kindness of the House Committee of our infirmary a meeting of the friends, professional and others, of the late Mr. C. Mac Ivor Goyder, was held the other night in the library of that institution, for the purpose of considering the question of a memorial to that talented and lamented young surgeon. In the first place, an expression of sympathy was conveyed from the meeting to the family of their late friend, and then the memorial project was taken up, Dr. Philipson presiding. It was moved, "That, with a view to perpetuate the remembrance of Mr. Charles Mac Ivor Goyder, surgeon, and inciting medical students to follow his meritorious example, it is desirable that a scholarship should be founded in Newcastle-on-Tyne Infirmary in Clinical Medicine and Surgery, which will bear his name." After some little discussion relative to applying the prize to the College of Medicine here, the deep and strong feeling of the meeting was expressed by the original motion being carried unanimously. Now, with regard to the College of Medicine, as that institution is considered to be in a prosperous condition, and is said to have a larger attendance of students than ever since its foundation, there is nothing to prevent it as a body from in some way commemorating the brief but distinguished career of one of its most meritorious students; but Mr. Goyder was in many ways intimately connected with, and attached to, the infirmary, and it is only right and proper, knowing his feeling, that the scholarship raised by his friends should be connected with his old home. The whole movement has been taken up with much spirit and feeling, evidently evincing a "labour of love" to the workers. It is sure to succeed; indeed, I believe about £100 was subscribed in the room for the purpose.

The Hospital Sunday collection for the present year is now complete, and shows a very satisfactory total, being rather more than £3700, the largest sum that has been raised in any year since the fund was established. The collections in places of worship show an increase of more than £100 over last year, and the workmen's collection an increase of more than £200.

A very curious, and it is believed unique, case of "neurotic plica, the result of hysterical neurosis on the elastic contractility of the hair," was read by Mr. Le Page of Durham, at a late meeting of the Northumberland and Durham Medical Society. The patient, aged seventeen, with a history of irregular menstruation, had felt ill with various neurotic symptoms, and a feeling of "pins and needles" over the scalp and general numbness of sensation. In the evening she washed her head in tepid water. After partially drying her hair with a towel (she did not approach a small fire which was in the room), and whilst so engaged in the presence of her parents, nearly the whole of the hair on the right side of her head drew up into a hard lump, and felt as if it would pull the roots out. Her father and mother were engaged until nearly two o'clock the next morning in the endeavour to untangle and straighten the almost solid mass, with but little success. The few ends combed out were spread on a pillow she then slept on; on awaking they found them drawn up as before. The hair on the left side of the head was quite smooth, very lightly waved, and not in the least tangled or drawn up. Viewed with the microscope, it was evident all the hairs which are contracted are flat, while those hairs which remain comparatively straight or looped and festooned are round. This disposed of a shadow of suspicion which naturally accompanies any unexplained phenomenon in a "hysterical" female. Viewed without the microscope, it was at once evident that no dexterity could have produced the condition of the hair. Mr. Le Page's hypothesis in explanation of the case is that excessive nerve tension found vent in the pigmentary portion of the hair—viz., that some change analogous to electrolysis took place in the medullary portion leading to chemical change, decrease of bulk, and contraction. Sir Erasmus Wilson regarded the condition as very interesting and extraordinary, and, as never seen by himself, had desired and received permission to deposit Mr. Le Page's specimen in the dermatological department of the museum of the Royal College of Surgeons of England.

Newcastle-on-Tyne, Jan. 1st, 1883.

SCOTTISH NOTES.

(From our own Correspondent.)

AN unfortunate accident occurred on Friday last to Mr. J. A. Campbell, the member for Glasgow and Aberdeen Universities. While shooting at Strathearn, the honourable gentleman received a pellet in the eye, fired from a distance by one of his guests. Dr. Wolfe of Glasgow was soon in attendance, and though the eye is still much swollen, and the difficulty of ascertaining its true condition considerable, it is hoped that the sight will not be permanently affected.

It is gratifying to hear that our other University M.P., Dr. Playfair, is gradually recovering strength. Report has it that the right honourable gentleman is not likely long to continue in office as Chairman of Committees at the House of Commons. The trying duties of that office and the recent excessive worry having told on Dr. Playfair's health, many of his supporters would rejoice to see his talents employed by the Government in another manner. There are several questions which will come before the House next session, in which the medical profession is specially interested, and Dr. Playfair's accurate knowledge of them, and of professional feeling with regard to them, cannot be fully utilised while he acts as chairman. On many grounds, therefore, his constituents would feel pleased should he accept other, and probably higher, office in the Government.

The treasurer to a fund subscribed for the purpose of erecting a memorial to the late Sir Wyville Thomson, reported to a meeting of subscribers, held last week under the presidency of Professor Maclagan, that 500 guineas were now in hand for the completion of the work. A sum of 100 guineas has been devoted to obtaining a bust for the Edinburgh University, to be executed by Mr. Hutchison, R.S.A., while the remainder of the fund will be used in providing the stained glass window for the church at Linlithgow.

The first hysterectomy performed in Aberdeen was that by Dr. Garden on Wednesday last. The patient was a young woman suffering from cancer of cervix. She died on Friday.

IRELAND.

(From our own Correspondent.)

AT the last meeting of the medical section of the Academy of Medicine, Dr. A. H. Benson exhibited a patient whose case is worthy of notice. It was a well marked example of Retinitis Albuminuria without constitutional disturbance. The patient, a boy aged sixteen, for the past three years had felt the sight of his left eye failing, and of his right during the past few weeks. The general health was perfect, with the exception of some frontal headache. The left eye was hypermetropic, and there was papilitis with large and very tortuous veins and small arteries, while numerous hæmorrhages existed in the retina of various sizes, mostly arranged in a manner radiating from the disc. There were also patches of retinal fatty degeneration, radiating from the yellow spot region. The urine passed in twenty-four hours amounted to thirty-five ounces, of specific gravity 1015,

with granular and hyaline tube casts. I may add that the patient had scarlatina when four years old.

Dr. Tanner of Cork, whose death was recently reported, died at an advanced age at his residence, Lapp's Island. He studied under Dr. Woodroofe to whom must be given the credit of having established the first school of medicine in Cork, and afterwards proceeded to Dublin, ultimately graduating in Glasgow in 1835. He completed his professional studies under Dupuytren in Paris, and became a Fellow of the Royal College of Surgeons in Ireland in 1844. In 1835 he commenced to practise in Cork, and on the resignation of Dr. Woodroofe succeeded that gentleman as surgeon to the South Infirmary, a post which he held until a few years since, when he retired, and was appointed consulting-surgeon. On Mr. Bullen's death he was appointed to the Chair of Surgery in the Queen's College; and was also connected with the Lying-in-Hospital, and Home for Incurables,

Dr. H. Macnaughten Jones of Cork has intimated his intention of resigning the post of Senior Physician to the Fever Hospital in that city, after being connected with the institution for nearly a dozen years. The Committee, in accepting the resignation, unanimously adopted a resolution expressing their regret at losing his services, and wishing him every success in the future.

It appears from a statement issued by the Local Government Board, preliminary to the annual report, that during the year ending Sept. 29th last there was a decrease in outdoor relief of £1985, as compared with the previous return. The total number of persons who received relief during the year was 470,821, less than the previous by 119,806. Under the Medical Charities Act, the expenditure was £158,080, or an increase of £1436; and under the Sanitary Acts, £51,635, or an advance of £2717. Some 170,000 received relief under the Charities Act.

The death-rate in Belfast during last month has been excessively high, being equal to 39·56 per 1000, the deaths numbering 633, as compared with 468 births. This high mortality was principally due to the large number of deaths from affections of the lungs, and to the prevalence of scarlatina, which latter affection caused sixty deaths.

PARIS.

(From our Paris Correspondent.)

IT is to be hoped that the municipal and medical authorities will profit by the lesson afforded by the typhoid epidemic which has been raging in Paris, and that they will be better prepared in future to meet similar emergencies. The authorities, it must be said, are making laudable efforts to mitigate as much as possible present existing evils; but as far as typhoid fever is concerned it becomes more and more evident that nothing short of the abolition of cesspools, a complete alteration in the entire system of drainage, and a thorough reform in the internal arrangements of privies or watercloseta, which should be placed on a footing more in accordance with the teachings of modern sanitary science than that which at present obtains in this otherwise universally admired city, would suffice to prevent the propagation of the disease. This subject has been so frequently treated of in the columns of THE LANCET that it would seem superfluous to reiterate it here; but it is one of such vital importance that it cannot be too often brought to public notice, and it is frequently only by doing so that reforms are effected. Strange though it may appear, yet I would venture to say that many sanitary reforms that have already taken place, and those proposed for future execution at an early date in this city, are in no small measure due to the persistent exposure in the English medical press of those defects which would otherwise remain unnoticed. As an earnest, however, of the good intentions of the Municipal Councillors of Paris, I may mention that they have ordered a commission, composed of medical and lay men, to thoroughly investigate the subject of sanitation, and a sub-committee is to proceed to London to study the advantages and inconveniences of the different systems adopted for the removal of the night soil in what the French politely style that modern Capernaum.

In the discussions that have been carried on at the Academy of Medicine and other medical societies it has been found that under the present administrative system in this country the difficulties attending the carrying out of the arrangements for dealing with epidemic diseases are almost insurmountable; for such duties are so divided amongst the police, municipal and medical authorities, and red-tapeism has such predominance, that no proper or effective control can possibly be exercised. This state of affairs has been brought officially to the notice of the Government, and it is hoped that Paris will ere long have its State Board of Health, or some central body composed principally of medical men, which will probably be a prelude to the eventual formation of a Ministry of Public Health.

The want of hospital accommodation has been greatly felt for some years, but this becomes more conspicuous whenever there is an epidemic. The population of Paris has considerably increased within the last fifteen or twenty years, but the number of hospitals has remained much about the same. Hospital accommodation is so limited that numbers of patients are daily refused admission, and in order to remedy this crying evil it is proposed not only to increase the number of hospitals, but to enlarge those wherever this may be feasible, and to create what the Director of the "Assistance Publique," in his report, terms a "hôpital-hospice." This new institution, as its name implies, is something between a hospital and an asylum, and is intended for the accommodation of chronic and incurable cases which crowd the hospitals, much to the detriment of patients suffering from acute diseases which need more immediate attention, and which are generally also more amenable to hospital treatment.

Professor Hayem, in support of his candidateship as member of the Academy of Medicine in the section of therapeutics, made a very important communication to the Academy on the relative value of transfusion of blood and the subcutaneous injections of ether in cases of imminent death from hæmorrhage. He commenced by remarking that transfusion was little practised in France, and this was owing in a great measure to the prejudice entertained against it by surgeons in this country. He recalled to mind the observations of Professor Verneuil which were published some four or five years ago, and which he again brought before the Congress of La Rochelle, in which he condemned transfusion as being a difficult, dangerous, and useless operation, adding that as the blood injected only acted as a stimulant, it is preferable to employ subcutaneous injections of ether to fulfil this latter indication. Professor Hayem, in order to put these assertions to the test, performed a certain number of experiments on dogs, from which he ascertained that when these animals were deprived of a quantity of blood equal to the nineteenth part of the weight of the body, the subcutaneous injections of ether are quite inefficacious, whereas with transfusion he was always successful in restoring the animal to life. The fluid he employed was defibrinated blood, or sometimes even pure serum.

Paris, Jan. 2nd, 1883.

Obituary.

ANTHONY DAVISON, L.R.C.S. ED.

BY the death of Mr. Davison, of Seaton Delaval, Northumberland, a conspicuous figure has been removed from medical circles in the north of England. Of an old Northumberland family, Mr. Davison was born in 1807, studied medicine at Edinburgh, where he took his licence in 1830, and immediately afterwards commenced practice in the district where he has since laboured so unremittingly and successfully. For many years subject to occasional attacks of rather severe illness, and during the past twelve months in very indifferent health, his fatal attack was ushered in by hæmatemesis, which occurred some six weeks before his death. Arriving in South Northumberland previous to the enormous development of the coal-pits with which we are now familiar, Mr. Davison commenced a practice which, growing with the industry of his neighbourhood, attained proportions probably unsurpassed in extent as a connexion managed by one man. From Newbiggin-by-the-Sea almost to Newcastle, the district was supplied by Mr. Davison and his army of assistants; and it is not too much to say that no one could have shown greater physical endurance, power of organisation, promptness in emergencies, or success generally in the management of such a huge con-

cern than did the subject of our notice. At times employing about a dozen assistants scattered widely over the coal field, each serious case received such an amount of Mr. Davison's personal care that grumbling was rare, and his popularity, whether judged by the *vox populi* or by that of their employers, was most assured. Surgery naturally received much attention in a district where accidents are of daily occurrence, and the manipulation, skill, and scientific treatment of the deceased gave such results as would be considered most satisfactory in our best hospitals. Acting as surgeon to numerous collieries, Mr. Davison was also medical officer of health for Cramlington, and medical officer and vaccinator for the same district. During such a lengthened and busy career many striking events were shared in, but that which made Mr. Davison's name most familiar at a distance was his conspicuous heroism and devotion during the anxious days succeeding the Hartley Colliery explosion in January, 1862. There he was the first to afford help, and the most constant in his solicitude for the many bereaved ones. There are few in our profession who have such high social position as Mr. Davison enjoyed, few who are trusted so by rich and poor alike.

Several years ago, after handing over some of the outlying branches to the then assistants, Mr. Davison assumed Dr. Anderson as partner, recognising in him, while an assistant, the good qualities fitting for such an important field of work. Not only the large number of former assistants scattered throughout the world, but all who were privileged with the friendship of Mr. Davison will feel saddened by the knowledge of his death.

Medical News.

UNIVERSITY OF LONDON. — The following candidates have passed the recent B.S. (Honours) Examination:—

SURGERY.

FIRST CLASS.

Walters, Fredk. Rufenacht (Scholarship and Gold Medal), St. Thomas's Hospital.
Sutton, Samuel Walter (Gold Medal), St. Thomas's Hospital.

SECOND CLASS.

Scharlieb, Mary Ann Dacomb, Madras Medical School, London School of Medicine, and Royal Free Hospital.
Buxton, Dudley Wilmot, University College.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Dec. 28th:—

Baber, John James Yarrow, Brompton-road.
Cock, Frederick William, Westbourne-park-terrace.
David, Evan Thomas, Upton-road, Downham-road.
Hitchcock, Alfred John, St. Helier's, Jersey.
Hunter, Mitchell, Marghera, Co. Derry.
Sarzana, Ettore, High-street, Kensington.
Smith, Henry Strode, Axbridge, Somerset.
Tilly, Alfred, Gilbert-terrace, West Hampstead.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Ernest George Foot, Alfred Gittings, and James Sprent Robertson, Middlesex Hospital; Thomas Wingrave, London Hospital; Walter Ernest Walter, Charing-cross Hospital.

THE LINCOLN LUNATIC HOSPITAL has received £1000 as a legacy left by the late Mr. Richard Ellison of Sudbrooke Holme, and which became payable on the death of a Mrs. Martin.

A PORTION of the library and art collections of the late Dr. John Brown, author of "Rab and his Friends," is to be sold in Edinburgh at the close of January and the beginning of February.

THE estimated cost of the new infirmary for the Paddington Union is £30,000, of which sum it is proposed to borrow £12,000 only at present. The Guardians at their meeting on the 27th ult. instructed the clerk to make inquiries in various directions for tenders for the sum required.

THE resolution of the General Baths Committee of the Salford Corporation to recommend the purchase of a site at the junction of Broad-street and Brindle-heath-road for the erection of public baths for Pendleton has been rescinded, and the Borough Council was, on Wednesday, asked to approve a site at the corner of Broad-street and Frederick-street, which is considered more suitable, and to sanction the purchase of 1500 square yards of land at 9*d.* per yard.

PROPOSED HOSPITAL FOR BURNLEY.—A scheme has been started for the erection of a new hospital for Burnley and district, to cost £10,000. Mr. John Butterworth has promised £1000, his nieces £500, and Mr. Altham, tea merchant, £500.

IT is generally understood that at the meeting of delegates from towns in North Wales shortly to be convened at Chester, a site on the Flintshire portion of that city will be proposed for acceptance. One of its citizens has presented £1000 towards the project.

UNIVERSITY OF CAMBRIDGE.—The degree of Doctor of Medicine has been conferred by the University upon Wm. Collingridge, M.A., M.B., S.Sc. Cert. Camb. (Christ's College), Medical Officer of Health of the Port of London. The subject chosen by Dr. Collingridge for Thesis was "Scurvy, its Causes and Prevention."

THE presentation of his portrait to Dr. Bain, Lord Rector of Aberdeen University, took place on the 27th ult. in the Common Hall of Mareschal College. The execution of the work was entrusted to Mr. George Reid, R.S.A., and is regarded as an excellent likeness of the distinguished logician.

IT is desired to raise £5000 towards the maintenance of a hospital built by Mrs. Gilbert Elliott at Ottery St. Mary, and which will be supported by that lady during her lifetime. The Lord Chief Justice and the Bishop of Oxford have made public appeals in favour of the movement, which gives promise of success.

THE ordinary funds of the South Devon and East Cornwall Hospital have been augmented by £900, as the result of the Hospital Sunday collections recently held in the district. The Children's Ward, too, has from the Sunday-school collections obtained £58. These amounts are most encouraging and satisfactory.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BEEVOR, HUGH, M.R.C.S., L.S.A.Lond., has been appointed Assistant House-Physician to King's College Hospital.
COCKEY, C. P., M.R.C.S., has been appointed Assistant House-Surgeon and Apothecary to the Female Department of the London Lock Hospital, vice Mr. P. P. Whitcombe, appointed House-Surgeon.
COWLEY, JOHN SELWYN, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the First District and the Workhouse of the Upton-on-Severn Union, vice Marsh, deceased.
COXWELL, C. FILLINGHAM, M.A., M.B.Cantab., has been appointed Medical Registrar to the London Hospital.
CURTIS, ALBERT, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Staines Urban Sanitary District.
EDWARDS, A. R., M.R.C.S., has been appointed House-Surgeon to King's College Hospital.
GROSVENOR, ALFRED OCTAVIUS, M.D., has been appointed Divisional Surgeon to the Metropolitan Police, West Hampstead District.
HOPKINS, H. CULLIFORD, M.R.C.S., of Bath, has been appointed Surgeon to the Police, vice G. E. Lawrence, deceased.
KEMPE, C. M., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Urban Sanitary District of New Shoreham.
KIRKLAND, ROBERT, M.B., M.Ch.Glas., has been appointed Medical Officer for the Third District of the Cheltenham Union.
MCGILL, A. F., F.R.C.S., has been appointed Honorary Assistant-Surgeon to the Leeds General Infirmary.
MONTFORD, JAMES, M.R.C.S., has been appointed Medical Officer for the Third District of the Upton-on-Severn Union.
MOODY, JAMES M., L.R.C.P.Ed., M.R.C.S., has been appointed Medical Superintendent of the Additional Asylum for the County of Surrey, Cane-hill, Coulsdon.
MUNCASTER, ALFRED E., M.R.C.S., has been appointed Medical Officer for the Barton-le-Clay District of the Luton Union.
OGILVIE, LESLIE, B.Sc., M.B.Edin., has been appointed Physician to the North-West London Hospital, vice S. H. T. Armitage, M.D., resigned.
PORTER, G. D., M.R.C.S., has been appointed Assistant House-Surgeon to King's College Hospital.
ROBSON, A. W. M., F.R.C.S., has been appointed Honorary Assistant-Surgeon to the Leeds General Infirmary.
RUSSELL, R. H., M.R.C.S., has been appointed Assistant House-Accoucheur to King's College Hospital.
SILCOCK, ARTHUR QUARRY, M.D., B.S.Lond., F.R.C.S., has been appointed Pathologist and Curator to St. Mary's Hospital, vice Henderson, resigned.
STIVENS, B. L., M.R.C.S., has been appointed House-Accoucheur to King's College Hospital.
THOMSON, ST. CLAIR, M.R.C.S., L.S.A.Lond., has been appointed House-Physician to King's College Hospital.
TYNAM, R. G., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to King's College Hospital.
WOOD, Mr. JOHN CUNDELL, has been appointed Surgeon to the Sunderland and Wear Police, vice Francis, deceased.

Births, Marriages, and Deaths.

BIRTHS.

BUDD.—On the 28th ult., at Eliot-terrace, The Hoe, Plymouth, the wife of George Budd, of a daughter.

GARRETT.—On the 31st ult., at Southsea, the wife of Charles Frederick Garrett, M.B., M.R.C.S., & L.S.A.Lond., of a son.

GLOVER.—On the 1st inst., at Dorrington House, Dorrington, near Shrewsbury, the wife of John Glover, M.R.C.S. & L.S.A.Lond., of a son.

HARVEY.—On the 29th ult., at 29, Harmer-street, Gravesend, the wife of G. H. Harvey, M.B., M.R.C.S., L.S.A.Lond., of a daughter, prematurely.

MCDONAGH.—On the 29th ult., at Mornington Villa, Hampstead-road, N.W., the wife of Jas. S. McDonagh, M.R.C.S., of a son.

TREVOR.—On the 28th ult., at Plymouth, the wife of F. W. Trevor, M.B., Army Medical Department, of a son.

MARRIAGES.

HENDERSON—BARROW.—On the 7th ult., at the Cathedral, Calcutta, William Robert Henderson, Surgeon, Army Medical Staff, to Ada May, daughter of Francis Barrow, of Calcutta.

JEFFREYS—DILLON.—On the 3rd inst., at St. George's, Bloomsbury, by the Rev. J. Montagu Cadman, Richard Jeffreys, M.R.C.S., of Eastwood House, Chesterfield, to Elizabeth Catherine Dillon, of Ballinasloe, daughter of the late Thomas Dillon, Esq., M.D., F.R.C.S.I., and J.P. for co. Mayo, and Poor Law Medical Inspector. No cards.

LAING—HARDING.—On the 13th ult., at St. George's Cathedral, Madras, Surgeon-Major James Anderson Laing, Medical Department, to Mary Agnes, third daughter of G. P. Harding, of Paris.

MEAD—MCPHERSON.—On the 29th ult., at St. James's, Kidbrook, Herbert Rimmington Mead, M.R.C.S., L.R.C.P., younger son of the late C. C. Mead, I.M.S., Bombay, to Louisa (Bobbie), youngest daughter of the late Innes McPherson, of Upper Norwood.

RONALD—SAYERS.—On the 28th ult., at St. Thomas's Church, Portman-street, Basil Ronald, L.R.C.P., and L.R.C.S.Ed., to Julia, daughter of the late John Gillespie Sayers, of Fulham, London.

SKERMAN—SHAW.—On September 28th, at All Saints', Palmerston, North Menawatu, New Zealand, Sidney Skerman, Surgeon, of Marton, Rangitikei, New Zealand, to Cecilia Marion (Lil), second daughter of George Shaw, Esq., of Whit Hern, Cheshunt, Herts, England.

WALKER—BENNETT.—On October 17th, at the Parish Church, Redcar, William Walker, M.R.C.S., to Margaret Louisa, third daughter of J. H. Bennett, M.D.

WOLFENDEN—JARDINE.—On the 27th ult., at Chorley Church, Cheshire, by the Rev. Addison Crofton, M.A., cousin of the bride, assisted by the Rev. H. Rogers, D.D., Vicar of St. Thomas Heaton Chapel, and the Rev. T. Conserdine, Vicar of Chorley, Richard Norris Wolfenden, B.A., M.B., Cantab, of 64, Welbeck-street, W., eldest son of Charles Wolfenden, of Bolton, to Jessie Stuart, youngest daughter of James Jardine, of Alderley Edge, Cheshire.

DEATHS.

BARRATT.—On the 28th ult., at Ditchling-rise (late of St. James's-street), Brighton, Arthur Newton Barratt, L.R.C.P. Ed. & L.F.P.S.Glas., youngest son of the late Oglethorpe Wakelin Barratt, Esq., of Birmingham, aged 42.

CORNFOOT.—On the 26th ult., at Leven, Fife, N.B., James Cornfoot, M.D., late H.M.I.S., aged 73.

CULLIMORE.—On the 23rd ult., at Yole Grove, County Wexford, John R. Cullimore, L.R.C.P., M.R.C.S., aged 31.

DAVISON.—On the 27th ult., at Hastings Cottage, Seaton Delaval, Northumberland, Anthony Davison, L.R.C.S.Ed.

EDWARDES.—On the 27th ult., at Stanley House, Hounslow, William Whitfield Edwardes, M.D.Brux., M.R.C.S.Eng., L.S.A.Lond., late of 1, Oakley-square, N.W., the youngest son of Thomas Edwardes, F.R.C.S.Eng., of Glascoed, Llansantffraid, Montgomeryshire.

ELLIOT.—On the 31st ult., at Carlisle, Robert Elliot, M.D., F.R.C.P., in his 72nd year.

HART.—On the 27th ult., at Great Coram-street, Russell-square, Adolphus Daniel Hart, M.R.C.S., aged 49.

HENSON.—On the 21st ult., at Park Villas, Harpurhey, Manchester, Sydney Henson, M.R.C.S., L.S.A.Lond., aged 55.

HILL.—On the 19th ult., at Lambton, New South Wales, John James Hill, J.P., L.R.C.P.Ed., L.F.P.S.Glas., Mayor of Lambton, and Honorary Surgeon to the Newcastle Hospital, eldest son of the Rev. R. Hill, Vicar of Royton, Lancashire, aged 39. (By telegram.)

OTTLEY.—On the 31st ult., at Ladbroke-grove, in his 80th year, Drewry Ottley, M.D., M.R.C.P., for more than twenty years resident at Pau, Basses Pyrénées, France.

SNELL.—On the 2nd inst., at Cazenove-road, Stamford-hill, Edward Snell, M.R.C.S., of Cazenove-road, and City-road, E.C., in his 70th year.

SLEDDALL.—On the 13th ult., at Blake Hill, Idle, Thomas W. Sleddall, M.R.C.S.Eng., eldest son of the late Thomas Rudd Sleddall, Hamilton-square, Birkenhead.

WILSON.—On the 29th ult., at Redlands Bank, Holmwood, Surrey, James Arthur Wilson, M.D., for many years Senior Physician at St. George's Hospital, in his 86th year.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, Jan. 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. First Lettsomian Lecture: Dr. Sansom, "On the Treatment of some Forms of Vascular Diseases of the Heart—Endocarditis."

Tuesday, Jan. 9.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Tyndall, "On Light and the Eye."

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—4 P.M. Mr. W. S. Duncan, "On the Probable Region of Man's Evolution."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Colcott Fox, "On Two Cases of so-called Erythema Gangrenosum."—Dr. Percy Kidd, "Contribution to the Pathology of Diphtheritic Paralysis."

Wednesday, Jan. 10.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

HUNTERIAN SOCIETY.—7.30 P.M. Council Meeting.—8 P.M. Dr. Charlewood Turner will show a Heart of Two Cavities.—Mr. T. McCarthy, "On Cases of Fracture of the Skull."

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown.—Mr. Knowsley Thornton, "On a Case of Extirpation of Uterus and Appendages for Epithelioma of the Cavity."—Mr. W. S. A. Griffith, "On Notes of a Specimen of Anteflexion of the Uterus."—Mr. C. E. Jennings, "On Transfusion."—Dr. Galabin, "On Notes of Two Cases of Transfusion of Blood."

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. A. D. Michael, "On Notes on the Anatomy of the Oribatidæ."

Thursday, Jan. 11.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—3½ P.M. Mr. Priestley Smith, "On the Growth of the Crystalline Lens."—Dr. David Lees, "On a Case of Paralysis of Third Nerve in a Child."—Dr. Abercrombie, "On a Case of Paralysis of Sixth Nerve in a Child."—Dr. Hughlings Jackson, "On the Movements of the Eyes in a Case of Ear Disease."—Dr. E. Maddox (communicated by Dr. Greenfield), "On a New Method of Determining the Relation between Convergence and Accommodation."—Mr. Rockliffe, "On a Case of Epithelial Tumour growing from a Hair in the Anterior Chamber."—Living Specimens at 8 o'clock.

Friday, Jan. 12.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—Annual General Meeting: Report of Council; Election of Officers and Council, 1883.—Dr. Coxwell, "On the Case of a Child with Symptoms resembling those of Myxœdema."—Dr. Davies-Colley, "On a Case of Enormous Enlargement of the Lower Lip caused by Operation."—Dr. Southey, "On Tachotée and Symmetrical Gangrene."

Saturday, Jan. 13.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Stewart's Instruments.)

THE LANCET OFFICE, Jan. 4th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 5.30 A.M.
Dec. 29	29·57	S.W.	51	51	..	55	47	..	Overcast
,, 30	29·71	S.W.	53	50	..	55	46	·19	Raining
,, 31	29·91	S.W.	55	51	..	55	51	·32	Overcast
Jan. 1	29·80	W.	55	54	..	56	49	·29	Raining
,, 2	29·69	W.	48	46	..	53	44	·11	Cloudy
,, 3	29·96	N.W.	48	44	..	48	43	·03	Overcast
,, 4	30·03	E.	45	42	..	50	41	..	Overcast

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

DEFECTIVE EDUCATION IN DISEASES OF WOMEN AND CHILDREN AND DISEASES OF THE EYE.

DR. MCKEOWN, of Belfast, surgeon to the Eye, Ear, and Throat Hospital, is much impressed with the laxity of the universities and the licensing bodies in regard to the requirements of their curricula in the matter of the two important groups of disease—those of women and children and of the eye. The inadequate provision in schools for teaching in these subjects is illustrated by what has lately been done in Belfast, where, at the Belfast Royal Hospital, an extern department, to cost £20 per annum, and an intern arrangement for four beds for diseases of women, have been organised. Four beds for diseases of the eye and ear have also been provided. These drops in the bucket have excited at once the gratitude and the dissatisfaction of Dr. McKeown. He should spend his strength in getting a proper Medical Council, containing men who understand the great field of general practice and the defects of medical and surgical education from a practical point of view. We wish him every success in his attempt to impress the examining bodies. Such attempts have, however, been made before, but with indifferent results.

SUDDEN DEATH AFTER DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Sept. 30th, 1882, p. 550, Mr. Percy Pope gives cases of sudden death after diphtheria. I have known three cases of sudden death in India during convalescence from diphtheria. Inman, in one of his books, if I remember rightly, gives cases of similar sudden death during convalescence from certain fevers, and I think his explanation of the phenomenon is that, as the heart is a muscle, it becomes as weak as any other portion of the muscular system, and being a most important muscle, on the proper action of which life depends, any sudden effort during convalescence which calls upon the heart to make an instantaneous and powerful contraction, finds it unequal to the task, and, as if paralysed, ceases to act. An emotion such as would cause a sudden outburst of laughter or any exertion on the part of the convalescent might be sufficient to cause the heart to collapse. If this be the case the remedy is a scrupulous care to prevent the convalescent from making the slightest exertion, and to prevent the occurrence of any emotion whatever, and to force him to keep the recumbent position until, by tonics, stimulants, food, and sleep, the muscular system—and with it the heart—acquires tone enough to meet demands on its contractile force.—I am, Sir, yours obediently,

E. BONAVIA, M.D.,
Surgeon-Major, Indian Medical Department.

Etawah, India, Nov. 2nd, 1882.

DOG BITES.

AN absurd superstition prevails that the bites of all dogs should be either cut out or cauterised, and the poor animals destroyed. It is not necessary to adopt either of these serious courses provided the dog is healthy. In fact they are simply ridiculous, and are calculated to produce groundless fear in the person bitten. Of course in severe cases erysipelas may supervene, but with ordinary care, the wound being cleansed by a disinfecting lotion, no serious consequences will follow. In all cases, however, a doctor should be consulted.

Percy R. Wilde, M.B.—We in the main agree with the views which seem to prompt our correspondent's questions. But we see no need for publishing them, especially as the pressure on our space is great. To his eighth question we answer that the Central Board will give a double qualification. The standard will be that of a minimum, and therefore ought to be lower than that of any university. Not only so, but it should be possible for a central authority to ascertain that all examinations carrying honours and special titles are more severe than those of the mere Licensing Board. And, in our judgment, it is the interest of universities, Scotch and English alike, to have means of satisfying a Central Board that their examinations are materially higher than those of a mere Licensing Board.

SEWER VENTILATION.

To the Editor of THE LANCET.

SIR,—The two great sanitary questions that are employing the attention of medical men at the present time are with regard to (1) the disposal of sewage in our large towns, and (2) the ventilation of the main sewers. As regards the former, it may safely be said that nothing should be thrown away which can really be made use of, and therefore the question resolves itself into which is the better system—irrigation or precipitation. As regards the latter question, I think it may safely be said that closed sewers are bad, inasmuch as the gases generated and various disease germs are likely to find their way even through the traps into the neighbouring houses. But there are two ways of ventilating the sewer, i.e.—*at* the road level, and *above* the roofs of the houses by means of air shafts.

Those who advocate road gratings say that air is the best antiseptic, and the greater the number of ventilators the purer the air and the greater the safety. There can be no question, I think, that ventilators tend to lessen the generation and accumulation of sulphuretted hydrogen, and to dilute that already formed; but still they must, at the same time, allow of the egress of various disease germs. Air may be sweet, but it may be dangerous, just as water may look clear and sparkling, and yet be poisonous. The life of germs is at present, I believe, scarcely ascertained, but we know that scarlatina and, it is said, cholera germs, even after long exposure to the air, will, on being subjected to heat and moisture, readily break forth into life, and reproduce themselves. This no doubt, in great measure, accounts for the successive outbreaks of disease. It certainly seems to me that ventilating ground gratings is approaching very closely the old system of open sewers, which was long ago condemned. I know of many places where these road ventilators have been adopted and become a nuisance, and there are no doubt many who could testify to the same fact. The only way to ventilate the sewers so as to prevent their being a nuisance and a source of danger is to run up air-shafts by the sides of the houses above the roof level. When two ways exist of remedying a nuisance, surely it is best to choose the one which involves the less danger. Of this I should say there cannot be a question.

I am, Sir, your obedient servant,

Kingston-on-Thames, Dec. 18th, 1882. F. P. ATKINSON.

G. G.—We think that our correspondent has a strong legal claim on the railway company for both his services and those of the gentleman who assisted him. As to the question of amputation, that is one which must be decided on the responsibility of the surgeons in actual attendance.

Dr. Macdougall (Carlisle).—In an early number.

ON POSITION IN HERNIA.

To the Editor of THE LANCET.

SIR,—Mr. Shillitoe, in your journal, reports a case in which he found inversion of the patient was successful in reducing the hernia. The method of inversion was, however, rather cumbrous and unpleasant to the patient. Among the many papers on this subject referred to in the "Medical Digest" (951: 6) is one by Mr. Thornton (THE LANCET, vol. ii., 1875, p. 243), in which the value and ease of merely raising the foot of the bed is pointed out. By this simple method I have frequently obtained most favourable results, both in hernia and uterine displacements. At times I have suggested to the patient, if young and active, in cases of uterine displacement, that she should practise as on a trapeze, hanging by the feet from the foot bed-rail, with a pillow on the ground for the head and shoulders; or, if a four-poster or tent bedstead, to hang with the feet over the top rail, a kind of exercise not certainly graceful, but novel and most decidedly effective.

I am, Sir, yours obediently,

Boundary-road, South Hampstead, N.W., R. NEALE, M.D. Lond.
Dec. 27th, 1882.

DEATHS BY VIOLENCE IN RUSSIA.

DEATHS by violence seem to be very frequent in Russia, the total for the last four years being no less than 164,436, of whom 129,328 were men, and 35,108 women, the proportion of the former to the latter being as 79 to 21. Out of the total of violent deaths, 11,655 were murders, 8613 suicides, 44,418 sudden deaths, 22,529 were attributed to the effects of drink, 1270 were due to lightning, 11,251 persons were run over, 3936 were burnt to death, 3326 were suffocated, 5144 were frozen to death, 31,511 were drowned, 364 were devoured by wild animals, and 19,409 were killed in various other ways.

SHIP SURGEONS.

AN excellent leading article appears in the *Daily Telegraph* of Wednesday, that must greatly assist the cause of ship surgeons, and alleviate the wretched condition of passengers in mercantile ships.

Associate, King's College.—It is quite true that a great part of the ground on which the hospital stands was a burial-ground, and crowded to excess with dead bodies. It was closed by Act of Parliament in 1851; it was formerly known as the Green Ground, subsequently as the Portugal-street Burial Ground, and for many years was the only entrance for members of the Royal College of Surgeons to the theatre to hear the annual oration and lectures delivered in it, the front entrance, in Lincoln's-inn-fields, being reserved for members of the Council and distinguished visitors. The late Mr. Thomas Wakley, M.P. for Finsbury, assisted by some resolute members of the College, at last succeeded in inducing the Council to put an end to this absurd arrangement.

L.S.M.—The subject for the next Collegiate Triennial Prize is not yet published. The following is the subject for the Jacksonian Prize for the present year—viz., "The Pathology, Diagnosis, and Treatment of Obstruction of the Intestines in its Various Forms in the Abdominal Cavity."

AN APPEAL.

To the Editor of THE LANCET.

SIR,—I regret to say since my appeal in aid of the orphan children of the late Dr. Handsel Griffiths, which appeared in your issue of the 23rd ult., I have received only the sum of £18 6s. I am surprised at this, for in the United Kingdom there are considerably over fifteen thousand practitioners, and surely out of that large number it might be expected that more would have come forward to help such a deserving object. The three little orphan boys I appeal for are brought to their present destitute position through no fault or negligence of their parents, who were both removed by death by the all-wise hand of Providence at an early age. Those who have merely perused my former letter without paying much attention to the claims it seeks to advocate, I would ask to read it again, in the hope that their benevolent feelings may lead them to assist in some small way in providing for the fatherless and orphans of a deserving brother. I do not want large contributions, but I would wish, if possible, something from each member of the profession who could afford it. A cheque or P.O.O. for any amount, no matter how small, will be thankfully received and acknowledged. I have received already the following sums:—From Dr. H. M. Tuckwell, Oxford, Dr. R. E. Burgess, Kettering, Dr. Henry Stear, Saffron Walden, £2 2s. each; from Dr. Frederick Robinson, Eastbourne, Eva, Ilkley, £2 each; from Drs. John R. Kirkpatrick, Dublin, Lombe Atthill, Dublin, Francis Cruise, Dublin, Stewart Woodhouse, Dublin, H. J. Waller, Barrow, A.M.D., Kent, G. W. T., London, James Archer Thomson, Brighton, J. R. Swanton, Bantry, £1 each.

I am, Sir, yours, &c.,

LAMBERT H. ORMSBY, M.D., F.R.C.S.

4, Merrion-square West, Dublin, Jan. 2nd, 1883.

F. G. L.—Our correspondent will probably find the desired information in Dr. Weatherly's "Ambulance Lectures," or Surgeon-Major Shepherd's "Handbook."

Mr. J. M. Smith.—Such information must be gathered from private sources rather than books.

The Widow of a Member of the Profession.—The question is a legal, not a medical, one.

"PERMANGANATE OF POTASH IN GONORRHŒA."

To the Editor of THE LANCET.

SIR,—No doubt many of your readers have tried injections of permanganate of potash in gonorrhœa. May I ask, through the medium of your columns, those who have done so to kindly give me their results. For some time past I have prescribed from two to four drachms of Condy's fluid to half a pint of water as an injection, a small syringeful being used many times a day in all cases that have come under my treatment, and in all stages, from acute to old standing gleet, with the result of a cure within a fortnight in every case. The injection is almost painless, and, I believe, altogether harmless, the only other treatment required being abstinence from alcoholic drinks.

I am, Sir, yours faithfully,

T. H. F. TOTHILL, M.R.C.P. Edin., &c.

Colombo, Ceylon, Dec. 7th, 1882.

GHASTLY IMPORTATION.

THE Chicago correspondent of the *The British Trade Journal* in enumerating the principle articles of import into that city, such as human hair, wigs, lace, nets, &c., says "Curiously enough, foreign skeletons of the genus *homo* are largely imported into Chicago, and are sold at less cost than they can be scraped, dressed, and mounted here. This, notwithstanding that we have no lack of pauper subjects buried at the expense of the county of Cook, and on which our medical colleges largely depend for their cadavers. Still, will it be believed, these foreign skeletons are loaded down by a tariff of 35 per cent.? This, too, is in face of the fact that the laws against 'resurrectionists' are extremely stringent in this and other Western States."

YOUNG AMERICA.

AT the close of Dr. Morell Mackenzie's lecture at the Bellevue Medical College, New York, one of the students from "out West" remarked to his neighbour, "That feller talks our language very well for a foreigner."

Staff Surgeon, Army.—Dr. Thomas Hume was born in Dublin, and died at Hanwell, October 21st, 1850, aged eighty-one. He was the constant friend and medical attendant of the great Duke of Wellington, and, as physician to the forces, followed the duke through all his campaigns. A good story is told of him. Going into a newspaper office in the Strand, he laid on the counter an advertisement of the death of a friend, with the usual fee of five shillings, when the clerk, reading it, said curtly, "Seven-and-six." The doctor replied that he had never paid more than five shillings for these simple announcements, to which the pert young fellow said, "Simple announcements! he died 'universally regretted!' Seven-and-six." In placing the additional half-crown down, the doctor said, "Well, young man, that is an additional expense which your executors will not have to pay." He was the last descendant of the celebrated mathematician, Dr. John Wallis.

AN OBSCURE CASE.

To the Editor of THE LANCET.

SIR,—I should be much obliged if some of my medical brethren would help me by their advice in the treatment of the following case:—

Mrs. F——, aged about forty, the mother of several children, has suffered for the past six months from severe pain in the left foot, supposed to have been brought on by weeding in the garden on a damp day. The pain is more or less constant, deep-seated, sometimes darting, yet not always in the same spot. It is sometimes in the metatarso-phalangeal joint of the great toe, sometimes in that of the little toe; at other times it is in the scaphoid, in the cuboid bone, in the sole of the foot, or in the heel. It is accompanied by a certain amount of swelling of the foot, and there is always considerable tenderness on pressure, so that the patient cannot bear to put it to the ground. The pain is worse at night, and is then so severe as to prevent sleep. The patient is otherwise in fair health but for phthisis pulmonalis, which, however, is at present quiescent. I have tried various liniments containing opium, aconite, belladonna, chloroform, camphor and chloral, and salicylate of soda; also the subcutaneous injection of morphia, blistering, the use of Martin's bandage, accompanied by elevation of the limb, and absolute rest, but with only temporary relief. I have also given the following drugs inwardly—*viz.*, salicin, salicylate of soda, iodide of potassium, and colchicum wine, but with no good effect. As the continued loss of sleep was weakening my patient considerably, I had recently a consultation with an eminent physician, but nothing that we could think of has had any curative effect. If we could be sure of the pathology of the case, we might discover something which would. There is no evidence of periostitis, or of locomotor ataxy. She has never had rheumatism or syphilis, and there is scarcely a possibility of gout. I think I may certainly exclude hysteria also.

I may add that her general health has been attended to by the administration of iron, quinine, and strychnine, and of a liberal supply of nourishment.—I am, Sir, yours faithfully,

December 30th, 1882. DUM SPIRO SPERO.

Brussels might apply to the Secretary of the Brussels Medical Graduates' Association, Dr. Pocock, 20, Golborne-road, W.

A. Z.—We should think about £100 per annum would be a fair remuneration.

Mr. Wm. Berry.—Yes.

IRON AND ARSENIC IN ANÆMIA WITH PREGNANCY.

To the Editor of THE LANCET.

SIR,—In reply to "Inquirens," under the head of correspondents in last week's LANCET, I see no reason why iron in combination with arsenic should not be continued in his case of anæmia with pregnancy. Iron improves the condition of the blood, and thus aids in re-establishing the general health. It tends to prevent rather than to induce abortion, and, also, cannot have any ill-effect on the fœtus in utero.

I am, Sir, yours truly,

Honor Oak, S.E., Dec. 31st, 1882. SPENCER T. SMYTH, M.D., &c.

A NEW SCALE OF CHARGES.

It is told of a very widely known American physician that when asked by a grateful patient to name his fee, he replied, "Well, I suppose you acknowledge that I have saved your life; now what do you value your life at? I suppose you consider it worth ten thousand dollars." "Well, yes, doctor, its worth that to me," was the reply. "Well, I will be generous, and take only five thousand," replied his physician, and the story goes that he pocketed his thousand pounds. For more than one reason this example cannot be regarded as worthy of imitation.

THE UNDERGROUND RAILWAY.

To the Editor of THE LANCET.

SIR,—Public attention has again been attracted to the question of remedying the unwholesome atmospheric condition of the Underground Railway. Mr. Barry, the engineer for the railway, appears to have prepared a scheme for increasing the number of ventilating shafts, and these new shafts would have opened on various parts of the Embankment, including gardens and recreation grounds for the "people." I was, therefore, very pleased to see that the Board of Works had rejected this scheme. It is well known that the air in the worst parts of the Underground Railway contains large quantities of carbonic acid gas, sulphur vapours, and carbonic oxide, not to mention other impurities equally injurious to health. Two of these gases, moreover, are very much heavier than air, and would only be removed very slowly by means of "shafts," unless great heat or large "fans" were used to promote a draught. But even allowing that ventilation by means of "shafts" were satisfactory as regards the Underground Railway, the fact would remain that the representatives of the said railway, while freeing themselves of an unwholesome nuisance, would be contaminating the already impure air of the London streets. Three questions then arise—1. Can the foul air be purified where it is? 2. Can it be carried by tall "shafts" far above the heads of the people? 3. Can the railway be compelled to consume its own smoke?

It is with the first of these questions that I wish to deal in this letter. Those of your readers who will refer to THE LANCET for August 21st, 1880, will find a note of some experiments made by Dr. Neale, showing that an atmosphere like that of the Underground Railway could be purified by means of caustic alkalies, which are very cheap. To THE LANCET for August 28th, 1880, he wrote further, explaining his method, and proposing that a purifying apparatus should be attached to each train. Later on he again wrote to THE LANCET, giving a diagram of the "chemical lung" which he had devised, and detailing experiments, one of which showed, if I remember rightly, that by his "chemical lung" the atmosphere of an unventilated room befouled by gas, tobacco smoke, and the breath of a great number of persons, relatively to the size of the room, was, in a short time, rendered pure and pleasant to breathe. It seems to me that if this process of air-purification is applicable to the Underground Railway, it ought at least to have a trial. The "lungs" might be placed vertically in the lower opening of the existing "shafts," and hung in some of those tunnels where the pestilential vapours "most do congregate." The objection to attaching them to the trains, as Dr. Neale proposed, would seem to be that the speed at which the trains travel would prevent sufficiently prolonged contact between the air and the alkaline solution at any particular spot on the line of rails. In order that the "lung" may work efficiently, its "endless sheet" must be kept continually wet with a solution of the alkali. Why, then, should not the engines already in use for pumping purposes at various stations on the Underground Railway be further employed to work the various "sheets," so that a portion of their surface would always be bathed in the solution contained in the "trough" of the apparatus?

I have penned these few lines with the view of drawing more attention to a "crying evil" (I might almost say a coughing evil), and I need not prolong this letter by enlarging on the statement that the greatest sufferers from the existing state of things are those with weak lungs.

I am, Sir, yours, &c.,

December 26th, 1882. INQUIRENS.

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COMMUNICATIONS not noticed in our present number will receive attention in our next.

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LETTERS, *each with enclosure*, are also acknowledged from—Mr. Glover Dorrington; Mr. Henson, Harparhey; Mr. Drummond; Mr. Clark, Streatham; Dr. Eastwood, Darlington; Dr. Johnson, Broughton; Mr. Twigg, Chatham; Mr. Grime, Blackburn; Mr. Johnson, Epsom; Dr. Dunlop, Dalbeati; Mr. Holyoak, Aylesford; Dr. Laffan, Cashel; Mr. Fonmartin, Knapp-hill; Messrs. Harman and Co., London; Mr. Pemberton, Chelmsford; Dr. Stable, Willesden; Mr. Matthews, Lisborn; Mr. Lawrence, Chepstow; Dr. McLauchlane, Cole Stream; Dr. Clouston, Gunnersbury; Mr. Macdonald, New Abbey; Mr. Neale; Dr. Stewart, Glaslough; Dr. B. Squire, London; Dr. Wanostrocht, Escrick; Mr. Davies, Sherbourne; Mr. Beavor, Newark-on-Trent; Mr. Bantock, London; Miss Watley, Colchester; Mr. Carbishley, Macclesfield; Mr. Hunter, Abington; Messrs. Hutchinson and Co.; Dr. Wilson, Hornby; Dr. H. Smith, London; Mr. Stilliard, Birmingham; Mr. Tuckwell, Oxford; Mr. Clements, London; Mr. Duncan, Oldham; Mr. Seymour, Coventry; Mr. Phillips, Bury; Dr. March, Rochdale; Dr. Beadle, Forest-hill; Mr. Brettle, Dudley; Dr. Hill, Royton; Mr. Harvey, Gravesend; Mr. Adams, Ipswich; Mr. Bryan, Hornsey; Dr. Gresham, Bromley; Mr. Johnston, Oldham; Mr. O'Brien, Edmondsley; Mr. Rutter, Hammersmith; Mrs. Wright, London; X. Y., Dulwich; Z., Edinburgh; Omega; F. M., Paisley; Permanent; Propylamine; Surgeon; Lady Superintendent, Liverpool; L. M., Spalding; L.R.C.P., Long Eaton; Nemo; J. J. D.; L.R.C.S.E. Dion; W. B.; Assistant, Kentish-town; H. R., Edinburgh; J. H. J., Cheltenham; A. B., Keighley; Medicus, Seaford; Cavendish; B. S.; J. H. C., Burnley; W. R.; A. F. H., Scarborough; Beta; Jocelyn, London; &c., &c.

Sunderland Herald, Guernsey Star, Philanthropist, Sanitary News, Pontefract Telegraph, Scotsman, &c., have been received.

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